

OFFICIAL TRANSCRIPT OF PROCEEDINGS BEFORE THE POSTAL RATE COMMISSION

In the Matter of:)
) Docket No.: R2006-1
POSTAL RATE AND FEE CHANGES)

VOLUME #22

RECEIVED

2006 OCT 27 P 4: 55
POSTAL RATE COMMISSION
OFFICE OF THE SECRETARY

Date: October 26, 2006
Place: Washington, D.C.
Pages: 7969 through 8187

HERITAGE REPORTING CORPORATION
official Reporters
1220 L Street, N.W., Suite 600
Washington, D.C. 20005
(202) 628-4888

In the Matter of:)
) Docket No.: R2006-1
POSTAL RATE AND FEE CHANGES)

Volume 22
Thursday, October 26, 2006



HON. GEORGE A. **OMAS**, CHAIRMAN
HON. DAWN A. TISDALE, VICE-CHAIRMAN
HON. RUTH Y. GOLDWAY, COMMISSIONER
HON. TONI HAMMOND, COMMISSIONER
HON. MARK ACTON, COMMISSIONER

On behalf of United States Postal Service:

SHEELA PORTONOV, Esquire
ERIC P. KOETTING, Esquire
SCOTT L. REITER, Esquire
United States Postal Service
475 L'Enfant Plaza, S.W.
Washington, D.C. 20260-1137
(202) 268-3012

APPEARANCES: (Cont'd.)

On behalf of the Office of the Consumer Advocate:

SHELLEY S. DREIFUSS, Esquire
EMMETT RAND COSTICH, Esquire
Postal Rate Commission
Office of the Consumer Advocate
901 New York Avenue, N.W., Suite 200
Washington, D.C. 20268
(202) 789-6837

On behalf of Advo, Inc.:

THOMAS W. MCLAUGHLIN, Esquire
Burzio & McLaughlin
Canal Square, Suite 540
1054 31st Street, N.W.
Washington, D.C. 20007-4403
(202) 965-4555

On behalf of Direct Marketins Association, Inc.:

DANA T. ACKERLY, Esquire
Covington & Burling, LLP
1201 Pennsylvania Avenue, N.W.
Washington, D.C. 20004-2401
(202) 662-5296

On behalf of Parcel Shippers Association:

TIMOTHY J. MAY, Esquire
Patton Boggs, LLP
2550 M Street, N.W.
Washington, D.C. 20037-1350
(202) 457-6050

On behalf of Valpak Dealers' Association, Inc.:

JOHN S. MILES, Esquire
William J. Olson, P.C.
8180 Greensboro Drive, Suite 1070
McLean, Virginia 22102-3860
(703) 356-5070

C O N T E N T S

WITNESSES APPEARING:

CHRIS FINLEY (Did Not Appear)
 LAWRENCE G. BUC
 ROBERT W. MITCHELL
 J. EDWARDS SMITH

<u>WITNESSES:</u>	<u>DIRECT</u>	<u>CROSS</u>	<u>REDIRECT</u>	<u>RECROSS</u>	<u>VOIR DIRE</u>
Lawrence G. Buc	7992	--	--	--	--
By Mr. Reiter	--	8035	--	--	--
Robert W. Mitchell	8057	--	--	--	--
J. Edward Smith	8070	--	--	--	--

C O N T E N T S

<u>DOCUMENTS TRANSCRIBED INTO THE RECORD</u>	<u>PAGE</u>
Corrected designated written cross-examination of Chris Finley, PSA-T-1	7975
Corrected designated written cross-examination of Lawrence G. Buc, DMA-T-1	7997
Corrected designated written cross-examination of Robert W. Mitchell, VP-T-3	8061
Corrected designated written cross-examination of J. Edward Smith, OCA-T-3	8070
Response of Witness Smith to interrogatories of Advo, Advo/OCA-T3-1, 3 through 6, 8, 10 through 12, 14, 16 through 18, 24 and 26 through 56	8073

E X H I B I T S

<u>EXHIBITS AND/OR TESTIMONY</u>	<u>IDENTIFIED</u>	<u>RECEIVED</u>
Corrected direct testimony of Chris Finley on behalf of Parcel Shippers Association, PSA-T-1	7974	7974
Corrected designated written cross-examination of Chris Finley, PSA-T-1	7974	7974
Corrected direct testimony of Lawrence G. Buc on behalf of Direct Marketing Association, Inc., DMA-T-1	7992	7995
Corrected designated written cross-examination of Lawrence G. Buc, DMA-T-1	7996	7996
Corrected direct testimony of Robert W. Mitchell on behalf of ValPak, VP-T-3	8057	8059
Corrected designated written cross-examination of Robert W. Mitchell, VP-T-3	8060	8060
Corrected direct testimony of J. Edward Smith on behalf of Office of Consumer Advocate, OCA-T-3	8070	8071
Corrected designated written Cross-examination of J. Edward Smith, OCA-T-3	8072	8072
Response of Witness Smith to interrogatories of Advo, Advo/OCA-T3-1, 3 through 6, 8, 10 through 12, 14, 16 through 18, 24 and 26 through 56	8126	8126

P R O C E E D I N G S

(9:33 a.m.)

CHAIRMAN OMAS: Good morning. Today we continue hearings to receive the direct case of participants other than the Postal Service in Docket No. R2006-1 considering the Postal Service's request for a rate and fee change.

Does anyone have a procedural matter to discuss at this point?

(No response.)

CHAIRMAN OMAS: Four witnesses are scheduled to appear today. They are Witnesses Finley, Buc, Mitchell and Smith.

There will be no cross-examination for our first witness, Mr. Finley.

Mr. May, do you have a correction or a corrected version of Mr. Finley's testimony to move into evidence?

MR. MAY: Yes. I have two copies of Chris Finley's testimony on behalf of Parcel Shippers Association, PSA-T-1, and I ask that it be moved into evidence.

CHAIRMAN OMAS: Is there any objection?

(No response.)

CHAIRMAN OMAS: Hearing none, I will direct

Heritage Reporting Corporation
(202) 628-4888

1 counsel to provide the reporter with two copies of the
2 corrected direct: testimony of Chris Finley.

3 That. testimony is received into evidence.
4 However, as is our practice, it will not be
5 transcribed.

6 (The document referred to was
7 marked for identification as
8 Exhibit No. PSA-T-1 and was
9 received in evidence.)

10 CHAIRMAN OMAS: Mr. May, have the answers to
11 the designated written cross-examination been reviewed
12 and corrected?

13 MR. MAY: They have, Mr. Chairman. I have
14 two copies of those.

15 CHAIRMAN OMAS: Would you please provide two
16 copies of the corrected designated written cross-
17 examination of Witness Finley to the reporter?

18 That material is received into evidence, and
19 it is to be transcribed into the record.

20 (The document referred to was
21 marked for identification as
22 Exhibit No. PSA-T-1 and was
23 received in evidence.)

24 //

25 //

BEFORE THE
POSTAL RATE COMMISSION
WASHINGTON, DC 20268-0001

Postal Rate and Fee Changes, 2006

Docket No. R2006-1

DESIGNATION OF WRITTEN CROSS-EXAMINATION
OF PARCEL SHIPPERS ASSOCIATION
WITNESS CHRIS FINLEY
(PSA-T-I)

Party

Interrogatories

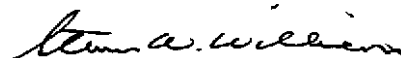
United Parcel Service

USPSIPSA-TI-1-2

United States Postal Service

USPSIPSA-TI-1-10

Respectfully submitted,


Steven W. Williams
Secretary

INTERROGATORY RESPONSES OF
PARCEL SHIPPERS ASSOCIATION
WITNESS CHRIS FINLEY (T-1)
DESIGNATED AS WRITTEN CROSS-EXAMINATION

Interrogatory

Designating Parties

USPSIPSA-T1-1
USPSIPSA-TI-2
USPSIPSA-TI-3
USPSIPSA-TI-4
USPSIPSA-T1-5
USPSIPSA-TI-6
USPSIPSA-TI-7
USPSIPSA-TI-8
USPS/PSA-T1-9
USPSIPSA-TI-I0

UPS, USPS
UPS, USPS
USPS
USPS
USPS
USPS
USPS
USPS
USPS
USPS

**RESPONSE OF PARCEL SHIPPERS ASSOCIATION WITNESS CHRIS FINLEY TO
INTERROGATORIES OF THE UNITED STATES POSTAL SERVICE (USPS/PSA-T1-1)
[ERRATA]**

USPS/PSA-T1-1 Please provide the assumptions used in the study reported in section 4 of your testimony, including the number of parcels going to each RDC, the weight of each parcel, the zone for each parcel based on DBMC entry and the zone for each based on DRDC entry.

ANSWER

I have attached a chart showing the number of parcels entered at each RDC and the number of parcels by weight and zone under DBMC entry and DRDC entry that I used in the study.

**RESPONSE OF PARCEL SHIPPERS ASSOCIATION WITNESS CHRIS FINLEY TO
INTERROGATORIES OF THE UNITED STATES POSTAL SERVICE (USPS/PSA-T1-1)
[ERRATA]**

Attachment to USPS/PSA-T1-1

Number of Parcels by RDC

RDC	Parcels
Dallas	36,830
Houston	25,775
San Antonio	13,816
Austin	11,051
El Paso	4,006

Number of Parcels by Weight and Zone

Weight	Zone (as DBMC Parcel)				Zone (as DRDC Parcel)			
	1&2	3	4	5	1&2	3	4	5
1	5,207	6,185	1,485	-	12,627	250	-	-
2	7,027	8,330	1,870	-	16,909	318	-	-
3	4,667	5,491	1,309	-	11,227	240	-	-
4	6,061	7,191	1,623	-	14,563	312	-	-
5	2,888	3,391	765	-	6,914	130	-	-
6	2,590	2,980	768	-	6,193	145	-	-
7	1,521	1,861	483	-	3,777	88	-	-
8	1,485	1,733	458	-	3,604	72	-	-
9	882	1,067	271	-	2,176	44	-	-
10	1,041	1,097	267	-	2,360	45	-	-
11	639	670	180	-	1,465	24	-	-
12	592	605	180	-	1,334	43	-	-
13	394	426	112	-	906	26	-	-
14	385	448	119	-	932	20	-	-
15	487	599	163	-	1,215	34	-	-
16	332	334	96	-	744	18	-	-
17	242	228	64	-	520	14	-	-
18	228	220	52	-	493	7	-	-
19	175	179	42	-	387	9	-	-
20	188	153	46	-	374	13	-	-
21	102	103	38	-	236	7	-	-
22	81	97	31	-	202	7	-	-
23	56	46	24	-	120	6	-	-
24	44	41	13	-	96	2	-	-
25	24	38	8	-	69	1	-	-
26	21	20	5	-	45	1	-	-
27	20	14	3	-	36	1	-	-
28	14	7	2	-	22	1	-	-
29	17	13	2	-	32	-	-	-
30	16	4	1	-	21	-	-	-
31	-	1	-	-	1	-	-	-
Total	37,426	43,572	10,480	-	89,600	1,878	-	-

USPS/PSA-T1-2

- a. Please confirm that neither the record in Docket No. R2006-1, nor the record in Docket No. N2006-1, contain information that the Dallas BMC will be broken into 5 RDCs, and that these RDCs will be located in Dallas, Houston, San Antonio, Austin, and El Paso. If not confirmed, please indicate where in the record this information can be found.
- b. If you confirm Part (a), please describe why Texas was selected as the focus of the study, why you hypothesized that the Dallas BMC would be broken into five RDCs, and why you selected Dallas, Houston, San Antonio, Austin, and El Paso as sites for those RDCs.

RESPONSE

- a. Confirmed. PSA requested this information in PSA/USPS-T42-2, but the Postal Service indicated that "No final determination has yet been made."
- b. Due to the potential impact of the END initiative on the parcel shipping industry, PSA formed a committee (which has subsequently led to the formation of an MTAC workgroup) to study its impact on shipper costs. Given the importance of this issue and because no information on the location of RDCs was forthcoming from the USPS, the committee decided that it would need to make assumptions regarding the potential locations of RDCs and believed that the state of Texas was a good starting place.

Lacking information from the USPS regarding the exact location of RDCs, the committee members (based upon their knowledge of the current postal network) decided that RDCs may be located in Dallas, Houston, San Antonio, Austin, and El Paso. Further, the purpose of our analysis was to develop a general sense of the impact of END on the industry and we did

not feel that our general findings would be sensitive to the exact locations of RDCs.

USPS/PSA-T1-3. On page 4 **you** refer to estimation of incremental **cost**. Please define what you mean by ‘incremental’ in this context.

RESPONSE

In this analysis, “incremental” is defined as additional costs above and beyond our normal operating expenses that result from the assumed network changes.

USPS/PSA-T1-4. Please refer to page 4 of your testimony, lines 5-9. Please show and explain how you calculate your estimate for incremental labor cost per parcel, identify all information sources, and provide citations for all your inputs.

RESPONSE

In our current environment, we manually *sort* parcels and use conveyors to transport the sorted parcels to trailers. Our sort capability is 12 – 14 trailers simultaneously. To calculate the increase in labor costs per parcel, we analyzed the impact of sorting parcels to approximately three times as many locations in ~~the~~ the same time period, so as to maintain our current throughputs, which are required to ensure our service levels to our customers. The cost to sort parcels to the additional locations accounts for **\$0.21/parcel**.

Additionally, within our environment, we batch pick single unit shipments to customers, whereby based upon our sort capabilities, we pick these units on average twice per shift (since ~~we~~ we can't simultaneously ship to all **BMCs**, we process twice to maximize efficiencies). To **accommodate** an expanded network within our current operations, we will need to pick our single unit shipments on average 6 times per shift. The incremental cost of this is **\$0.10/parcel**.

Finally, in our current environment, we floor-load all trailers. If palletized, **we** will experience incremental costs associated with picking, transporting, setting-up, marking, stretch-wrapping, and loading totes onto trailers. The cost to fill the totes with parcels is estimated to be equivalent to the cost **of** floor-loading a trailer. The cost to switch from floor-loaded to palletized accounts is **\$0.03/parcel**.

The impact of these additional labor costs have not been studied in an engineered labor method, but rather using our current productivity rates and the expected impact of these changes. In total, we calculate the cost to be

\$0.34/parcel. We submitted \$0.20 with the assumption that we would identify process improvements that would offset some of the increased costs, but not all of the costs.

USPS/PSA-T1-5. Please refer to page 4 of your testimony, lines 10-13. Please show and explain how you calculate your estimate for incremental equipment cost per parcel, identify all sources, and provide citations for all inputs.

RESPONSE

The largest equipment expense is the acquisition of corrugated totes. In the absence of information on what the mail acceptance rules would be, we have included the cost of totes that we use to transport packages. We prefer these totes as they are more durable and provide for better handling and transportation of our perishable product. Based upon our vendor supplied pricing of these totes, the complete cost of one tote is \$31.38. We estimated to support our volume of parcels to the Texas region we would need 1,100 totes. This calculated to **\$0.302/parcel**. Additional expenses were included to account for the cost of storing and transporting the totes in outside warehouse facilities, as we do not have adequate storage space in our facilities to inventory these supplies. These associated costs were an additional **\$0.08/parcel**, for a total estimate of **\$0.38/parcel**.

USPS/PSA-T1-6. Please refer to page 4 of your testimony, lines 14-16. Please show and explain how you calculate your estimate for "volume utilization of the trailer in a palletized environment," identify all sources, and provide citations for all inputs.

RESPONSE

We estimated our "volume utilization of the trailer in a palletized environment" based upon some historical data and assumptions. The following is our calculation:

53' Trailer inside dimensions (approximate)

51' long, by 97" wide, by 103" **tall**.

The following calculates the "theoretical" cube of the inner trailer:

$((51' \times 12") \times 97" \times 103") / (12" \times 12" \times 12")$

which equals 3,538 cubic feet

Tote inner dimensions (approximate)

37.5" x 48" x 36"

which equals 37.5 cubic feet / tote

We anticipate double stacking the totes and thus we would be able to load 44 totes per trailer. In a perfectly cubed scenario where the trailer is cubed out by the totes, we would have a utilization of $(37.5 \text{ cubic-ft per tote} \times 44 \text{ totes}) / 3,538$ cubic feet of trailer. The result would be utilization of **47%**.

We also calculated the cube utilization if we stacked in a palletized fashion up to a maximum of 72" high. If the inner dimensions of a trailer are 103" high, then a perfectly cubed palletized area would be 70% utilized. We expect that unused space would be at least 10%, thus estimated that 60% utilization was a reasonable assumption.

USPS/PSA-T1-7. Please refer to page 4 of your testimony, lines 14-20.

- a. Please show and explain how you calculate your estimate for incremental transportation cost per parcel, and provide citations for all inputs.
- b. Please explain the "multiple transportation simulations" you employ in developing your estimate, including the methodology, all assumptions, and data inputs while documenting the simulations per Rule 31(k).
- c. Would all mailers' transportation costs increase, or would some experience decreases? Please explain your response.
- d. Please provide a complete breakdown of the transportation cost increases you project by the impact of moving from bedload to palletization as compared with mileage increases. In doing so, please distinguish the respective impacts of the number of trips, size of the trailer, count and cube of parcel for an average day to the five hypothetical RDCs.
- e. What simulation software was used to perform your analysis? Please describe the type of analysis performed (e.g., stochastic, discrete event, etc.). Provide a list of the inputs variables and constraints used within the model.

RESPONSE

- a. Simply stated, we calculated how many trailers we would need to support the movement of parcels to one BMC, as is currently the process. We then estimated how many trailers we would need for each of the five assumed RDCs, given that we would see our trailer utilization reduced to 60% efficiency due to palletization. Then, we obtained freight quotes to each destination from our origin facility in Monroe, Wisconsin. This

produced the per-parcel cost differential between the base case (current state) and the proposed case (future state).

- b. The “multiple transportation simulations” we employed were really taking a look at freight rates if we were to deploy multiple stop-offs across more than one RDC on parcels originating from Monroe, Wisconsin. The other assumptions were to determine the impact of splitting BMC-destined parcels into RDC-destined parcels and determining if we would still be able to release trailers within our service delivery timelines as we refine our sorts to more locations. Without detailed modeling, but based upon intuition, we ~~anticipate~~ that we will have difficulty running cost-effective line-haul transportation to many RDC's.
- c. I am only comfortable commenting on The Swiss Colony's costs.
- d. I do not have the detailed breakdowns that you request. **As** discussed in my response to subpart (a) of this interrogatory, we calculated our increased trailer needs by taking the total number of trailers shipped in 2005 to Dallas, calculating the number of packages to each RDC, and then determining the number of trailers we would need to ship to RDCs based upon 60% trailer utilization. Based upon our calculations, we would need to ship nearly twice as many trailers under the RDC scenario.
- e. We did not use simulation software.

USPS/PSA-T1-8. Please refer to page **5** of your testimony, lines 6-9. Please show and explain how you calculate your estimate for postage savings per parcel, and provide citations for all inputs.

RESPONSE

We compiled a list of sectional center facilities whose parcels we currently enter in Dallas by referring to a database we keep containing USPS DBMC information. Then, we estimated which of the sectional centers that we currently enter in Dallas would be covered by the new entry points (Austin, El Paso, Houston, and San Antonio) under the proposed scenario. To determine this, we went to the USPS website and did a search for the ZIP Codes for each of those cities. For instance, most of the ZIP Codes shown under El Paso on the USPS website begin with 799. Therefore, in **our** study, ZIP Codes that **began** in 799 were re-zoned from El Paso instead of Dallas.

After determining the new entry point **for** each parcel, we recalculated zoning based on the zoning charts from the USPS website. Then, we recalculated rates based on the new zoning and compared it to the rates based on the original zoning. Below is a snapshot of our input table.

PkgID	Weight	DBMCZip	DBMCZone	DBMCRate	DRDCZip	DRDCZone	DRDCRate
37193191	2	786	3	2.91	707	2	2.36
37193195	2	773	3	2.91	770	2	2.36
37193390	5	750	2	3.1	770	2	3.1
37193401	3	783	4	4.05	702	2	2.62
37193402	2	775	3	2.91	770	2	2.36
37193412	1	782	3	2.30	702	2	2.12
37193415	10	774	3	6.29	770	2	4.09
37193416	4	754	2	2.87	752	2	2.07
37193418	2	792	3	2.91	752	3	2.91
37193419	1	761	2	2.12	752	2	2.12

USPSIPSA-TI-9. Your analysis apparently involves one set of Texas locations, while the descriptions of the END environment developed by the Postal Service focus on an entire nationwide network.

- a. Is it your testimony that your analysis of Texas can be extrapolated to a nationwide network?
- b. If so, on what basis do you justify that extrapolation?

RESPONSE

- a. I do not believe that the results for the rest of the nation will be exactly the same as for Texas. ~~However~~, I do believe that the general findings – END will impose additional costs on parcel shippers and that these additional costs will not be fully offset by the postage savings from qualifying for lower zone rates – ~~will~~ apply elsewhere.
- b. Not applicable.

USPSIPSA-TI-IO. On page 4, lines 5 – 9, you describe an increased labor cost due to a shift to **RDCs**.

- a. Provide a detailed flow diagram, as well as written description, that describes the current distribution methods employed by your company, including description of:
 - i. existing sortation equipment (type of equipment, throughput rate, separation capacity);
 - ii. flow from distribution to trailer (*i.e.*, conveyor, manual, fork lift);
 - iii. trailer loading methods including time to load; and
 - iv. complete cycle time for a package within the distribution center.
- b. Provide the same information requested in part (a) as estimated for the future scenario modeled.

RESPONSE

- a. After parcels are "packaged" for distribution, they enter *our* sortation area. This is a manual sortation process, whereby the shipping label contains a sort code that is visually read by an employee who then removes the parcel from the conveyor line and moves the parcel to a perpendicular conveyor line, based upon the sortation code. The sortation code is assigned to a trailer / door, therefore the parcel is then transported via conveyor to the appropriate trailer. The parcel is then delivered to the trailer by conveyor, whereby employees bedload the trailer.

- b. We have not studied in detail the flow that will be required *to* minimize ~~our~~ costs in the future scenario. We do know that we do not have adequate space to move from bedloading to palletizing, in a safe and efficient manner. It is likely that we will be faced with a significant decision *to* revamp our facility design, and/or review the carriers we use for the business.

1 MR. MAY: Thank you. Mr. Chairman, today
2 PSA filed a declaration of authenticity of Witness
3 Finley for both his testimony and his responses to
4 interrogatories.

5 CHAIRMAN OMAS: Thank you, Mr. May.

6 MR. MAY: Thank you.

7 CHAIRMAN OMAS: Is there any additional
8 written cross-examination for Witness Finley?

9 (No response.)

10 CHAIRMAN OMAS: Our next witness today is
11 already under oath in this proceeding.

12 Mr. Ackerly, will you proceed?

13 MR. ACKERLY: I call Lawrence Buc to the
14 stand, please, Mr. Chairman.

15 Whereupon,

16 LAWRENCE G. BUC

17 having been previously duly sworn, was
18 recalled as a witness herein and was examined and
19 testified further as follows:

20 DIRECT EXAMINATION

21 (The document referred to was
22 marked for identification as
23 Exhibit No. DMA-T-1.)

24 BY MR. ACKERLY:

25 Q Would you state your name for the record,
Heritage Reporting Corporation
(202) 628-4888

1 please?

2 A Lawrence G. Buc.

3 Q Mr. Buc, I am going to hand you a copy of
4 testimony that has been previously filed in this
5 proceeding numbered DMA-T-1.

6 Would you review this document and state
7 whether or not this document was prepared under your
8 supervision and control?

9 A It was.

10 Q Do you adopt this testimony as your
11 testimony in this proceeding?

12 A I do.

13 Q If you would review the document that I have
14 handed you, I believe that there are certain changes
15 and corrections that have been made in that document
16 as compared to the document originally filed in this
17 case.

18 Would you describe those changes for the
19 record, please?

20 A Yes, I would. On page 5 of my testimony,
21 the quote from Witness Loutsch's testimony that
22 appeared on lines 26 to 41 has been revised in
23 accordance to reflect Witness Loutsch's revised
24 testimony. He had revised his testimony, and I have
25 now picked up his revised quote.

1 Then on page 15 on line 1 the number "3.820"
2 should be replaced with the number "5.587". I also
3 pointed that out in response to a Postal Service
4 interrogatory chat that was a mistake.

5 Then two minor changes or two changes flow
6 from that. On page 15, line 4, the words "almost
7 identical" should be replaced with "superior", and on
8 line 6 "almost five" should be changed to "over
9 seven".

10 Those are the only changes.

11 MR. ACKERLY: Mr. Chairman, I have two
12 copies of the testimony as changed by Mr. Buc. I
13 would propose that this testimony be admitted into
14 evidence and transcribed into the record.

15 CHAIRMAN OMAS: Is there objection?

16 (No response.)

17 CHAIRMAN OMAS: Hearing none, I will direct
18 counsel to provide the reporter with two copies of the
19 corrected direct testimony of Lawrence G. Buc.

20 That testimony is received into evidence.
21 However, as is our practice, it will not be
22 transcribed.

23 MR. ACKERLY: Excuse me, Mr. Chairman. If I
24 may just clarify for the record?

25 The first change that Mr. Buc made caused a

1 change in the lines. It pushed lines further into the
2 document. I have provided for each member of the
3 Commission and for counsel to the Postal Service, as
4 well as for counsel to the Commission, copies of the
5 revised testimony.

6 So that the record is clear, I suggest that
7 all references to this testimony be to the revised
8 lineation numbers, as opposed to the originally filed
9 numbers.

10 CHAIRMAN OMAS: Without objection. That
11 testimony will be received into evidence. However, as
12 is our practice, it will not be transcribed.

13 (The document referred to,
14 previously identified as
15 Exhibit No. DMA-T-1, was
16 received in evidence.)

17 CHAIRMAN OMAS: By the way, Mr. Ackery, you
18 don't have to worry about getting to that mic. There
19 are mics up there, so you can just stand up and talk
20 and you'll be picked **up**. There are mics all over.

21 MR. ACKERLY: Okay. Thank you, Mr.
22 Chairman.

23 CHAIRMAN OMAS: Yes, **sir**.

24 Mr. Buc, have you had an opportunity to
25 examine the packet of designated written cross-

1 examination provided to you this morning?

2 THE WITNESS: Yes, I have.

3 CHAIRMAN OMAS: If the questions contained
4 in that packet were proposed to you orally today,
5 would your answers be the same as those you provided
6 in writing previously?

7 THE WITNESS: They would be.

8 CHAIRMAN OMAS: Are there any additions or
9 corrections *you* would like to make to those answers?

10 THE WITNESS: No.

11 CHAIRMAN OMAS: Counsel, would you please
12 provide two copies of the corrected designated written
13 cross-examination of Witness Buc?

14 That material is received into evidence and
15 is to be transcribed into the record. Thank you.

16 (The document referred to was
17 marked for identification as
18 Exhibit No. DMA-T-1 and was
19 received in evidence.)

20 //

21 //

22 //

23 //

24 //

25 //

BEFORE THE
POSTAL RATE COMMISSION
WASHINGTON, DC 20268-0001

Postal Rate and Fee Changes, 2006

Docket No. R2006-1

DESIGNATION OF WRITTEN CROSS-EXAMINATION
OF DIRECT MARKETING ASSOCIATION, INC.
WITNESS LAWRENCE G. BUC
(DMA-T-1)

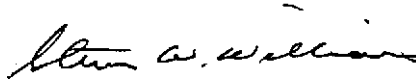
Party

Interrogatories

United States Postal Service

USPSIDMA-TI-1-29. 34-39

Respectfully submitted,



Steven W. Williams
Secretary

INTERROGATORY RESPONSES OF
DIRECT MARKETING ASSOCIATION, INC.
WITNESS LAWRENCE G. BUC (T-1)
DESIGNATED AS WRITTEN CROSS-EXAMINATION

InterrogatoryDesignating Parties

USPSIDMA-TI-1	USPS
USPSIDMA-TI-2	USPS
USPSIDMA-TI-3	USPS
USPSIDMA-TI-4	USPS
USPSIDMA-TI-5	USPS
USPSIDMA-TI-6	USPS
USPSIDMA-TI-7	USPS
USPSIDMA-TI-8	USPS
USPSIDMA-TI-9	USPS
USPSIDMA-TI-10	USPS
USPSIDMA-TI-11	USPS
USPSIDMA-TI-12	USPS
USPSIDMA-TI-13	USPS
USPSIDMA-TI-14	USPS
USPS/DMA-TI-15	USPS
USPS/DMA-TI-16	USPS
USPSIDMA-TI-17	USPS
USPSIDMA-TI-18	USPS
USPSIDMA-TI-19	USPS
USPSIDMA-TI-20	USPS
USPSIDMA-TI-21	USPS
USPSIDMA-TI-22	USPS
USPSIDMA-TI-23	USPS
USPSIDMA-TI-24	USPS
USPSIDMA-TI-25	USPS
USPSIDMA-TI-26	USPS
USPSIDMA-TI-27	USPS
USPSIDMA-TI-28	USPS
USPSIDMA-TI-29	USPS
USPSIDMA-TI-34	USPS
USPSIDMA-TI-35	USPS
USPSIDMA-TI-36	USPS

Interrogatory

USPSIDMA-TI-37
USPSIDMA-TI-38
USPSIDMA-TI-39

Designating Parties

USPS
USPS
USPS

**RESPONSE OF WITNESS BUC TO INTERROGATORIES OF
THE UNITED STATES POSTAL SERVICE**

USPS/DMA-T1-1. On page five of your testimony, you quote witness Loutsch from page 31 of his testimony (USPS-T-6), as follows:

Between cost reductions programs and BPI, the Postal Service identifies realizable cost savings for technical personnel and supervisors. Supervisory cost savings beyond those estimated cannot be assumed to occur based on theories of volume variability, because supervisory responsibilities relate to mailflows, networks and operations -- not merely to employees. In addition, cost reduction programs frequently require additional supervisory time and attention in order to capture cost savings, to maintain service, and to ensure operating efficiencies. Therefore, the Postal Service specifically examines cost savings opportunities relating to Cost Segment 2 for each applicable program, rather than making arbitrary assumptions that supervisor costs follow in lockstep with estimated changes in craft staffing levels.

- a. Please confirm that the section of witness Loutsch's testimony that you quote was modified by errata filed on July 31, 2006 as shown below. If you do not confirm, please explain fully.

Between specific cost reduction programs and BPI, the Postal Service identifies realizable cost savings for technical personnel and supervisors. Cost reduction program implementations and supervision of operations frequently require additional supervisory time and attention in order to capture cost savings, to maintain service, and to ensure operating efficiencies. Therefore, the Postal Service specifically examines a program's cost savings opportunities, including those relating to Cost Segment 2, rather than making assumptions that supervisor costs follow in lockstep with estimated changes in craft staffing levels. Most cost reduction programs result in changes to the work environment. While a supervisor may have less people to supervise in the new environment, other responsibilities related to the new equipment and/or a changed environment add to a supervisor's workload. There are also ongoing responsibilities that do not change as a result of fewer employees, e.g., budget, safety, operating performance data monitoring, and coordination of mail flows. While not directly related to specific programs, supervisory, technical, and administrative savings are being pursued via the BPI/LMI processes.

- b. If you do confirm, will you be correcting your testimony to reflect witness Loutsch's testimony as received into evidence? If not, why not?

Responses

(a) Confirmed that witness Loutsch modified his testimony shortly after DMA filed interrogatories exploring the relationship between supervisors and crafts supervised in cost reduction programs.

(b) Yes

RESPONSE OF WITNESS BUC TO INTERROGATORIES OF THE UNITED STATES POSTAL SERVICE

USPSIDMA-TI-2. You state on page 2, line 14-17 of your testimony that:

However, the Postal Service claims that these truly impressive savings in craft labor will not enable it to save even a single supervisor workhour in any of these three years. See USPS-LR-L-49, L49_R2006_8hr.xls, Attachments D, E, and F. This claim is simply not credible.

- a. Please confirm that the Postal Service has included the following reductions in supervisory workhours and costs in the "BPI/LMI" portion of Section 1A, "Operating Programs Cost Reductions" at LR-L-49 Attachments A, B, C, D, E, and F.

(Dollars and workhours in thousands)	Segment 2 BPI/LMI Portion of Section 1A, Workhours	Segment 2 BPI/LMI Portion of Section 1A, Dollars	LR-L-49 Reference
FY 2006	302	\$13,309	Attachment A, D
FY 2007	442	\$20,269	Attachment B, E
FY 2008	550	\$26,166	Attachment C, F
Total	1,294	\$59,744	

- b. Please explain the basis for your statement quoted above in view of witness Loutsch's testimony on page 31 of USPS-T-6: "While not directly related to specific programs, supervisory, technical, and administrative savings are being pursued via the BPI/LMI processes."
- c. Please explain your understanding of the relationship between the supervisory savings included in the BPI/LMI portion of Section 1A and the specific programs identified in Section 1A.

Response

- (a) Confirmed.
- (b) As I explain in my testimony, the Postal Service should base Supervisory cost reductions on those for Crafts just as cost level changes, mail volume changes, non-volume workload changes and additional workday changes are based on those for crafts. An aggressive cost reduction program might also find BPI improvements in addition to these.
- (c) Please see USPS-T-6, pages 30 to 31.

**RESPONSE OF WITNESS BUC TO INTERROGATORIES OF
THE UNITED STATES POSTAL SERVICE**

USPSIDMA-TI-3. Do you agree that supervisors have ongoing responsibilities, such as those described by witness Loutsch on page 31 of his testimony that would continue in a new work environment? If your response is other than an unqualified yes, please explain fully.

Response

I agree that supervisors do have some ongoing responsibilities that would continue in a new work environment. The important questions are how many of the cost reduction programs actually change the work environment and how much of the responsibilities would continue in the new environment.

While witness Loutsch asserts on page 31 that most cost reduction programs result in changes to the work environment, he provides no support for this assertion. As I stated in my testimony, my reading of the cost reduction programs supports the view that many of them will not result in a changed work environment. Finally, witness Loutsch cites some ongoing responsibilities like safety **and** budget that do appear to be related to the number of employees.

**RESPONSE OF WITNESS BUC TO INTERROGATORIES OF
THE UNITED STATES POSTAL SERVICE**

USPS/DMA-T1-4. Please refer to page 1 of the attachment to the response to DMA/USPS-T6-21.

- a. Please confirm that supervisory duties include the following: monitoring operational performance data, ensuring that operational information reported is complete and accurate, participation in mail ~~surveys~~/tests related to quality and service performance, coordination of mail flows, budget preparation and control, and meeting with customers and major mailers to resolve problems and improve service. If you do not confirm, please explain why.
- b. Please confirm that these duties would not vary materially if at all with the number of employees supervised. If you do not confirm, please explain which ones would vary materially and why.

Response

(a) Confirmed.

(b) Although neither I nor the Postal Service has any studies to support my view, I believe that the time required for many of the duties described in (a) above do not appear to vary with the number of employees for an individual supervisor in a given plant. However, I also believe that, in the aggregate, supervisors spend more time on these activities in larger plants than in smaller ones, indicating the time spent on these activities does vary to some degree with the number of employees. Given that the discussion on supervisors recurs, it would seem to be an area ripe for study before the next case.

**RESPONSE OF WITNESS BUC TO INTERROGATORIES OF
THE UNITED STATES POSTAL SERVICE**

USPS/DMA-T1-5. Using the Automated Induction System – Phase 1 program (described at page 10 of LR-L-49) as an example, please respond to the following.

- a. Please confirm that this program is defined to automate the preparation and feeding of flat mail to 210 AFSM 100 machines as described in LR-L-49 at page 10.
- b. Please confirm that on Attachment A, and B of LR-L-49, the clerk workhour savings for this program are stated at 572,000 in FY 2006 and 1,358,000 in FY 2007 for a total of 1,930,090 workhours.
- c. Assuming that there are 1,767 workhours (LR-L-49, Attachment N) in a workyear, please confirm that the stated savings convert into approximately 1,092 clerk workyears.
- d. Assuming that the systems are implemented at the planned 210 sites, please confirm that the savings for a single implementation would be 5.2 workyears.
- e. Assuming that all supervisors at the implementation site are currently supervising twenty employees each, how many supervisory positions would be eliminated at each of the facilities as a result of this program.
- f. Please provide an explanation of and the calculations on which your estimate of supervisory reductions is based.

Response

- (a) Confirmed.
- (b) Confirmed.
- (c) Confirmed.
- (d) Confirmed only by assuming an even distribution of labor across sites.
- (e) With one supervisor to 20 employees, saving 5.2 craft workyears at a site will also save .26 supervisory workyears.
- (f) Under the assumptions in part e, there is one supervisor for every 20 craft employee so Supervisory workyears are 5 percent of craft workyears. Saving 5.2 craft workyears will consequently save .26 supervisory workyears. (5 percent of 5.2 = .26) In this calculation, I mirror the Postal Service assumptions in the rollforward for cost level and mail volume changes, non-volume workload changes, and additional workday changes that supervisory changes are proportional to the changes in the craft supervised. I also mirror the Service's assumption that fractional changes are both captured and incurred

**RESPONSE OF WITNESS BUC TO INTERROGATORIES OF
THE UNITED STATES POSTAL SERVICE**

USPS/DMA-T1-6. On page 2 of your testimony you also state that "the Postal Service recognizes that, as a general matter of cost causality, supervisory workhours are a function of craft workhours." To support this argument you cite USPS-LR-1, which states that "mail processing supervisors have a span of control that is essentially constant in a given work organization structure It is recognized that a change in employee workhours, caused by a change in mail volume, may not be accompanied immediately by a corresponding change in first line supervisory workhours. However, for any substantial or prolonged change in the level of nonsupervisory employee effort for a given work activity, there will be an accompanying change in first line supervisory requirements". Please confirm that this quote recognizes a relationship between supervisor and craft hours "caused by a change in mail *volume*," and only "in a given work organization structure" and only "for a given work activity." If you do not confirm, please explain fully.

Response:

Confirmed.

**RESPONSE OF WITNESS BUC TO INTERROGATORIES OF
THE UNITED STATES POSTAL SERVICE**

USPS/DMA-T1-7. Refer to Table 13 in your testimony.

- a. Would you agree that changes in workhours from year to year are impacted by other factors besides cost reduction program, e.g. workload, composition of days in a year, leap year, service improvements, and other program changes? If you do not agree, please explain fully.
- b. Have you done any analysis of how much of the change in your table 13 relates to cost reduction programs? If your answer is other than no, please provide your analysis and explain it fully.
- c. Please confirm that the workhour data shows only how workhours have changed and do not explain the causes on the changes. If you do not confirm, please explain fully.
- d. Have you done any quantitative analysis of the causes of the workhour changes in your Table 13? If so, please provide the analysis.

Response

- (a) Yes.
- (b) **As** a point of clarification, Table **13** is data provided by the Postal Service. The Postal Service was unable to provide these data at a less aggregated level. I have not performed any analysis other than that I discussed which was to point out that during the period the Postal Service was engaged in an aggressive cost reduction program, changes in craft hours were accompanied by changes in supervisory hours.
- (c) Confirmed, but please see my response to b. above.
- (d) No. Please note that the data in Table 13 are provided by the Postal Service.

**RESPONSE OF WITNESS BUC TO INTERROGATORIES OF
THE UNITED STATES POSTAL SERVICE**

USPSIDMA-TI-8. Please refer to page 7 of your testimony where you state: "since 1999, total employee workhours, excluding those of Postmasters and Supervisors, have been reduced by 11.4%; in this same period of time, supervisory hours have been reduced by 9.5%."

- a. Please explain your basis for selecting 1999 as the appropriate base year for making these calculations.
- b. Why would 1999 be a more appropriate base year than 1996 or 1997? Please explain fully.
- c. Please confirm that total hours have declined by almost 9.7% since 1997 but supervisor hours have declined by only 5.2% since 1997. If you do not confirm, please provide the correct percentages and explain how they were calculated.
- d. If, as you state, "it is manifest in the (Table 13) data that reductions in craft labor are accompanied by reductions in supervisory hours," please explain why total hours have declined by almost 9.7% since 1997 while supervisor hours have declined by only 5.2%.
- e. Please confirm that total hours have declined by almost 8.6% since 1996, but supervisor hours have declined by only 2.5% since 1996. If you do not confirm, please provide the correct percentages and explain how they were calculated.
- f. If "it is manifest in the (Table 13) data that reductions in craft labor are accompanied by reductions in supervisory hours," please explain why total hours have declined by 8.6% since 1996 while supervisor hours have declined by only about 2.5%.

Response

- (a) I selected 1999 because it appeared to be the beginning of aggressive cost control efforts based on the total labor hours.
- (b) 1999 is a better base year than 1996 or 1997 because 1999 marked a turning point in workhour trends. From 1963 (the first year of the data that the Postal Service provided) to 1999, total workhours (excluding Postmasters and Supervisors) and Supervisors workhours both display fairly consistent positive growth. Over that period, total workhours (excluding Postmasters and Supervisors) increased by an annual average of 1.3 percent and supervisory workhours averaged an increase of 1.4 percent. Since then, workhours have shown a distinctly negative trend.
- (c) Confirmed.
- (d) The quoted statement supports my position. Craft hours have declined and so too have supervisory hours.
- (e) Confirmed.
- (f) Please see my response to d above.

RESPONSE OF WITNESS BUC TO INTERROGATORIES OF
THE UNITED STATES POSTAL SERVICE

USPS/DMA-T1-9. Please refer to page 4 of your testimony where you point to the Letter Recognition Enhancement Program as evidence that many cost reduction programs do not change the work environment.

- a. Do you have any evidence other than the intuitive interpretation you have provided that this program has no impact on the work environment? If so, please provide any such evidence.
- b. Do you have any evidence that any of the Postal Service's other cost reduction programs do not change the work environment? If so, please provide it.
- c. Do you have any quantitative analysis to support your conclusions? If so, please provide it.

Response

- (a) A description of the program seems to indicate that it will have no impact on the work environment. I would not characterize that as intuition.
- (b) Please see pages 4 to 5 of my testimony
- (c) Please see b above.

**RESPONSE OF WITNESS BUC TO INTERROGATORIES OF
THE UNITED STATES POSTAL SERVICE**

USPS/DMA-T1-10. Please refer to page 1 of the attachment to the response to DMNUSPS-T6-21 and confirm that only one of the ten supervisor duties and responsibilities listed is the direct supervision of employees. If you do not confirm, please explain fully.

Response

While a list of 10 "duties and responsibilities" of supervisors was provided as a response to DMNUSPS-T6-21, the list in no way implies that supervisors' time is spaced evenly across the listed duties. For example, I find it highly unlikely that on average supervisors spend an equal amount of time "supervis[ing] a medium sized group of employees engaged in mail processing and distribution activities" as they do "meet[ing] with union representatives to resolve disagreements".

Furthermore, while it may be true that only one of the listed activities involves "direct" supervision of employees, they all could be indirectly impacted by the number of employees under a given supervisor's authority. For example, scheduling and assigning work (the second supervisor duty listed on page one of the attachment to DMA/USPS-T6-21) might not fall under the category of "direct" supervision, but the amount of time a supervisor spends scheduling and assigning work is directly related to the number of employees for whom he or she is responsible.

**RESPONSE OF WITNESS BUC TO INTERROGATORIES OF
THE UNITED STATES POSTAL SERVICE**

USPS/DMA-T1-11. Please refer to Attachments G, H, and I of USPS-LR-L-49

- a. Please confirm that many cost reduction programs result in the addition of clerk, maintenance, and other craft hours, but no supervisor hours. If you do not confirm please explain your answer.
- b. Using your logic that cost reduction programs savings should generate proportional craft savings. should these program increases result in proportional supervisor increases? If your answer is other than yes, please explain your answer.

Response

- (a) I don't know how many "many" is, but I can confirm that there are cost reduction programs that result in the addition of craft hours but not supervisor hours.
- (b) It has always been my position that supervisors hours should increase if cost reduction programs or other programs increase craft hours. These should be taken into account just as the reductions in supervisor hours from reductions if craft hours should be. Please see my testimony at page 7.

**RESPONSE OF WITNESS BUC TO INTERROGATORIES OF
THE UNITED STATES POSTAL SERVICE**

USPS/DMA-T1-12. Please refer to USPS-T-6 Exhibit **K**. Please confirm that the Postal Service estimated the September 2006 COLA to be \$291. If you do not, confirm please explain why.

Response

Confirmed.

**RESPONSE OF WITNESS BUC TO INTERROGATORIES OF
THE UNITED STATES POSTAL SERVICE**

USPS/DMA-T1-13. Please refer to the response to POIR 13.

- a. Please confirm that the actual September 2006 COLA was much higher than estimated (\$791 for NALC and \$812 for APWU, NRLCA, and Mailhandlers, versus \$291 as shown in USPS-T-6 Exhibit K). If you do not confirm, please explain why.
- b. Should the Commission take this additional cost into account when considering the appropriateness of a 1 percent contingency? Please explain any negative response.

Response

- (a) Confirmed.
- (b) In setting the contingency, I would recommend that the Commission take into account both adverse and positive developments. Thus, if COLA is higher than estimated it should consider this. In similar fashion, if increases in health insurance premiums are less than estimated, the Commission should also consider this.

RESPONSE OF WITNESS BUC TO INTERROGATORIES OF
THE UNITED STATES POSTAL SERVICE

USPSIDMA-TI-14. Please refer to the Integrated Financial Plan FY 2007. The FY 2007 Financial Summary table at page 1 indicates that the planned Net Deficiency After Escrow is \$1.6 billion. This approved budget plan includes \$0.8 billion additional revenue (\$75.3 billion less \$74.5 billion) when compared to the FY 2007 After Rates revenue at Exhibit USPS 6A (revised), yet the resulting deficiency is \$0.4 billion more than is projected in the revenue requirement. Given this projected increase in the net deficiency, do you continue to believe that the contingency should be reduced to zero? If your response is anything other than "no," please explain your reasons for continuing to believe the contingency should be reduced in light of the worsening net deficiency.

Response

The Integrated Financial Plan for FY 2007 in and of itself does not change my position on the contingency. I do not believe that projections from the Integrated Financial Plan should be substituted for rate case estimates since they have not been the subject of the kind of testing by intervenors that rate case estimates undergo.

**RESPONSE OF WITNESS BUC TO INTERROGATORIES OF
THE UNITED STATES POSTAL SERVICE**

USPSIDMA-TI-15. Please refer to page 17 of your testimony where you state that one of the reasons the contingency can be eliminated is that the Postal Service can respond to adversity through annual rate increases. Please confirm that a future rate increase would have to be implemented well prior to the end of FY 2008 to have any impact on the test year. If you do not confirm, please explain why.

Response

Not confirmed. Rate increases would only have to be implemented before the end of FY 2008 to have an impact on Test Year finances. A rate increase that raised 56 billion annually in additional revenue and was implemented Sept. 1 would increase TYAR net income by about \$500 million, all else being equal. But the much more important point is that more frequent rate increases provide the Postal Service with a finer grained opportunity to match costs to revenues on a dynamic basis, thus rendering less likely the need for a contingency to meet unforeseen expenses or revenue shortfalls.

**RESPONSE OF WITNESS BUC TO INTERROGATORIES OF
THE UNITED STATES POSTAL SERVICE**

USPS/DMA-T1-16. Please refer to pages 16-17 of your testimony where you state that one of the reasons the contingency can be eliminated is that Postal Service real estate has appreciated and can be used as a buffer against adversity as sales of buildings increase due to END related closings and consolidations. Please identify the specific facilities that will be vacated and sold as a result of the END program prior to the end of FY2008. Please provide documentation quantifying the expected gain on the sales of these facilities and the cash flow resulting from the sales.

Response

I cannot identify specific facilities that will be vacated and sold before the end of the Test Year or how much the Postal Service will recognize from these sales, but the cited pages of my testimony outline why it is reasonable to believe that some will be sold and some revenue recognized.

**RESPONSE OF WITNESS BUC TO INTERROGATORIES OF
THE UNITED STATES POSTAL SERVICE**

USPS/DMA-T1-17. Should the Commission consider any factors not mentioned in your testimony, e.g. the state of the economy, identifiable financial and operational risks, when considering the Postal Service's proposed contingency? If your answer is yes, please provide the factors you believe should be considered.

Response

My testimony is clear on the point that in thinking about the proper size of the contingency, I recommend that the Commission adhere to its oft-repeated approach cited in my testimony and consider both the possibility of adverse outcomes and the Service's ability to cope with an adverse outcome. On the first point, the Commission has stated

"Lacking any additional empirical information for guidance on an appropriate contingency provision, the Commission must evaluate the subjective claims of risk the Postal Service makes in support of an increased contingency provision. As in past cases, the Commission assesses these subjective claims by examining evidence bearing on the Postal Service's financial conditions, the state of the national economy, and other relevant factors." PRC Op. R2000-1 at para. 2160 (citing PRC Op. R84-1 at para. 1051).

I see no reason for the Commission to depart from this approach.

I also see no reason for the Commission to depart from its articulated position regarding the Service's ability to co:

"In our prior opinions in omnibus rate proceeding we have recognized that the contingency reserve has two basic purposes. The first is to provide insurance against the possibility of a test year deficit resulting from misestimates of test year accrued revenue and expenses. The second is to protect against the possibility of a test year deficit resulting from unforeseeable events not capable of being prevented through honest, efficient, and economical management, See PRC Op. R84-1 at para. 1017. Because these are its purposes, a critical factor in determining the amount of the contingency provision is the relative ability of the Postal Service to absorb unforeseen expense increases and revenue shortfalls. See PRC. OP. R77-1 at 25." PRC Op. R87-1 at para. 2067.

**RESPONSE OF WITNESS BUC TO INTERROGATORIES OF
THE UNITED STATES POSTAL SERVICE**

USPSIDMA-TI-18. Please refer to the Commission's Opinion and Recommended Decision in Docket No. R84-1 at paragraph 1051, which states that the "the most recent data available show that the Service has a current equity of \$451 million. Viewed against the Service's test year revenue requirement of over \$29 billion, this figure, of itself, does not militate in favor of reducing the contingency." Does the fact that the Commission chose to recommend a 3.5 percent contingency in Docket No. R84-1 despite equity equal to 1.6 percent of the revenue requirement alter your opinion that the 1 percent contingency in the current proceeding should be reduced to zero percent? Please explain your answer fully.

Response

No. Please see my testimony on pages 11 – 17 on how I recommend that the Commission should ~~set~~ the contingency.

**RESPONSE OF WITNESS BUC TO INTERROGATORIES OF
THE UNITED STATES POSTAL SERVICE**

USPS/DMA-T1-19. Have you performed any analysis of the time required to transfer processing operations, close, and sell a mail processing facility? If so, provide that analysis.

Response

I have not performed any such analysis

**RESPONSE OF WITNESS BUC TO INTERROGATORIES OF
THE UNITED STATES POSTAL SERVICE**

USPS/DMA-T1-20. Please confirm that equity in the Postal Service's real property is of no use in dealing with an adversity that would require additional cash unless the properties are sold or borrowed against. If you do not confirm, please explain **how** such property provides a buffer against adversity in the Test Year.

Response

Confirmed.

**RESPONSE OF WITNESS BUC TO INTERROGATORIES OF
THE UNITED STATES POSTAL SERVICE**

USPS/DMA-T1-21. Please consider the following hypothetical. A budget analyst estimates that revenue for one item his company sells will be \$10,000 three years into the future. Actual revenue for that year turns out to be \$10,022. Would you consider this a significant variance? If your answer is other than no please explain how much variance you would consider significant and what criteria were used.

Response

I can develop scenarios under which this would be a significant variance. If the company had locked in factor input prices and had guaranteed all its orders over the time period, this could be considered a significant variance. But without highly predictable factor input price this would probably not be considered a significant variance.

**RESPONSE OF WITNESS BUC TO INTERROGATORIES OF
THE UNITED STATES POSTAL SERVICE**

USPS/DMA-T1-22. Please refer to line 27 page 8 of your testimony, where you state:
"A net surplus of \$173 million does not appear to meet the plain English requirements of the Act."

- a. What amount would meet the requirements of the Act?
- b. Please explain how the proper amount of surplus or deficit should be determined

Response

(a) As with all matters of judgment, it is difficult to provide a bright line. A \$173 million surplus in this case, however, seems to be clearly over any bright line. In the past, the Postal Service has proposed rates that are much closer to breakeven, both on an absolute basis and as a percentage of the revenue requirement.

(b) I would recommend that the Rate Commission use its reasoned judgment to set a surplus or a deficit very close to zero.

**RESPONSE OF WITNESS BUC TO INTERROGATORIES OF
THE UNITED STATES POSTAL SERVICE**

USPS/DMA-T1-23. Please refer to line 1 of page 9 of your testimony, where you state: "As the table shows, a surplus of \$173 million is very inconsistent with historical values for surplus/deficits."

- a. Please confirm that the surplus in Docket No. R2005-1 was \$281 million. If you do not confirm please explain why.
- b. Do you consider \$281 million to be "very inconsistent with historical values for surplus/deficits"? Please explain your answer.

Response

- (a) As I explained in my testimony, Docket R2005-1 was a settled case. As such, it should have no precedential value.
- (b) I do consider it to be inconsistent with historical values as demonstrated in LR DMA-1.

**RESPONSE OF WITNESS BUC TO INTERROGATORIES OF
THE UNITED STATES POSTAL SERVICE**

USPS/DMA-T1-24. Please refer to Appendix C of the Docket No. R2005-1 Opinion and Recommended Decision. Please confirm that the test year net surplus recommended by the PRC was \$184.671 million. If you do not confirm please explain why.

Response

Confirmed.

**RESPONSE OF WITNESS BUC TO INTERROGATORIES OF
THE UNITED STATES POSTAL SERVICE**

USPS/DMA-T1-25. Please refer to page 10 of your testimony, where you urge the PRC to “reduce rates by enough so that there is no surplus in TYAR.” Please consider the following hypothetical. The PRC runs the rollforward model and designs a set of rates intended to generate enough revenue to produce a test year breakeven considered to meet all PRA and Commission criteria. When the after rates revenue from this exercise is totaled, and a statement of revenue and expenses is produced, the result is a TYAR surplus of \$172.6 million. In this scenario should the PRC re-design the rates in order to reduce the surplus? If your answer is yes, which rates should be reduced in order to reduce the surplus? Please explain your answer.

Response

Under the hypothetical you present, I would recommend that the PRC redesign rates in order to reduce the surplus. The hypothetical does not provide sufficient information to allow me to make recommendations as to which rates should be reduced.

**RESPONSE OF WITNESS BUC TO INTERROGATORIES OF
THE UNITED STATES POSTAL SERVICE**

USPS/DMA-T1-26. Please refer to Table 2 on page 14 of your testimony.

- a. Please confirm that Docket No. R76-1 reflects equity of \$363 million, which was 2.6 percent of the revenue requirement of \$14.171 billion. If you do not confirm, please explain.
- b. Please also confirm that the contingency in that Docket was **4.0** percent. If you do not confirm, please explain.
- c. Would you agree that your position that equity of \$2.266 billion, or 2.9 percent of the revenue requirement of \$77.511 billion in this Docket, should result in a contingency of zero percent is inconsistent with the equity, revenue requirement, and contingency amounts reflected in Docket No. R76-1? If you do not agree, please explain how the R76-1 relationships support your argument.

Response:

(a) Table 2 on page 14 of my testimony shows the Contingency Request as a percentage of the revenue requirement and also shows the contingency request amount and TY equity. Thus, from the table I can confirm that equity was \$363 million. Table 2 does not show equity as a percent of revenue requirement nor the absolute value of the revenue requirement. I can, however, confirm that the revenue requirement was \$14.171 billion and that 363 million is 2.6 percent of \$14.171 billion.

(b) Confirmed.

(c) No. Please see my testimony on pages 11-17 for a discussion of my recommendations on how the Commission should set the contingency.

**RESPONSE OF WITNESS BUC TO INTERROGATORIES OF
THE UNITED STATES POSTAL SERVICE**

USPSIDMA-TI-27. Please refer to page 15 of your testimony, where you state that the "projected cash balance at the end of the test year is \$3.8 billion," and LR DMA-1, tab 8, where you calculate this amount by adding cash changes for FY 04 through FY 06 from various sources to the FY 03 ending cash balance. Please confirm that the methodology you have used does not include cash changes for FY 07 and FY 08. If you do not confirm, please explain fully.

Response

LR DMA-1, tab 8 shows a Test Year cash balance of \$5.587 billion and my testimony will be corrected to reflect that. The \$3.8 billion is the number calculated for R 2005-1. My calculations for the Test Year do include cash changes for FY 07 and FY 08.

**RESPONSE OF WITNESS BUC TO INTERROGATORIES OF
THE UNITED STATES POSTAL SERVICE**

USPS/DMA-T1-28. Please refer to LR DMA-LR-1, tab 8, where you calculate the \$3.820 billion amount by adding cash changes for FY 2004 through FY 2006 from various sources to the FY 2003 ending cash balance. Please confirm that using these amounts and this method results in a calculated end of year cash balance of \$3.983 billion for FY 2005 ($\$3.426 - \$1.390 + \$1.947 = \3.983). If you do not confirm please explain fully.

Response

Confirmed.

**RESPONSE OF WITNESS BUC TO INTERROGATORIES OF
THE UNITED STATES POSTAL SERVICE**

USPS/DMA-T1-29. Please refer to the FY 2005 Annual Report of the Postal Service and page 582 of USPS LR L-50, and confirm that the ending FY 2005 cash is \$930 million. If you do not confirm, please explain fully.

Response

Page 42 of the 2005 Annual Report shows a 2005 cash balance of \$930 million.

**RESPONSE OF WITNESS BUC TO INTERROGATORIES OF
THE UNITED STATES POSTAL SERVICE**

USPS/DMA-T1-34. Please refer to your response to USPS/DMA-T1-8(b), where you state that 1999 was a better choice as a base year than 1996 or 1997 because since 1999 "workhours have shown a distinctly negative trend." Is it your testimony that cost reduction savings could not have occurred during years prior to 1999? If your answer is other than no, please explain fully.

Response

No.

RESPONSE **OF** WITNESS BUC **TO** INTERROGATORIES **OF**
THE UNITED STATES POSTAL SERVICE

USPS/DMA-T1-35. Please refer to your response to **USPS/DMA-T1-8(d)**. Please confirm that by "supports my position," you mean supports your argument that supervisor cost reduction savings should be proportional to craft cost reduction savings. If you do not confirm, please explain to what position you are referring. Please explain how a decline in total hours of 9.7 percent and a decline in supervisor hours of only 5.2 percent since 1997 supports your argument that supervisor cost reduction savings are proportional to craft cost reduction savings.

Response

Confirmed. As I explain in my response to **USPS/DMA-T1-30 c and** in my testimony, the aggressive cost reduction programs that the Postal Service has undertaken provide a natural experiment as to whether reductions in craft costs induce reductions in the costs of their supervisors. The results of the natural experiment seem to indicate that they do and provide additional corroboration of this fact. I do not divide the change in supervisors hours by the change in craft hours to calculate a proportionality factor.

**RESPONSE OF WITNESS BUC TO INTERROGATORIES OF
THE UNITED STATES POSTAL SERVICE**

USPSIDMA-TI-36. Please refer to your response to USPS/DMA-T1-18. In Docket R84-1, in which the Commission applied a 3.5 percent contingency provision, it observed that equity of \$451 million or 1.6 percent of the revenue requirement, "does not militate in favor of reducing the contingency." In the current filing you argue that the contingency should be reduced to zero because the Postal Service has an estimated test year after rates equity of \$2.266 billion, which is 2.9 percent of the revenue requirement. Assume hypothetically that the estimated test after rates equity in this filing were \$1.240 billion or 1.6 percent of the revenue requirement. What amount of contingency would be indicated in this scenario?

Response

The hypothetical posed does not provide enough information to allow me to frame a response.

**RESPONSE OF WITNESS BUC TO INTERROGATORIES OF
THE UNITED STATES POSTAL SERVICE**

USPSIDMA-TI-37. Please refer to your response to USPSIDMA-TI-21. Please confirm that the Postal Service does not have guaranteed orders which are assumed in your hypothetical scenario.

Response

Confirmed.

**RESPONSE OF WITNESS BUC TO INTERROGATORIES OF
THE UNITED STATES POSTAL SERVICE**

USPSIDMA-TI -38. Please refer to your response to USPS/DMA-T1-23. Is it your testimony that test year breakeven does not have to be achieved in settled cases? Please explain fully and indicate how much variance from breakeven you believe is appropriate in settled cases.

Response

I am not testifying about the standards applicable to settled cases in general, nor to such standards as they might have applied to the record in R2005-1.

However, I would point out several facts concerning the settlement of R2005-1. First, the Stipulation and Agreement (the "Settlement Agreement") in that case contains numerous provisions making clear that the parties' agreements apply to the specific circumstances of that case, and that case only. The USPS proposal in that case was unusual in two interrelated respects. First, it proposed an across-the-board rate increase; second, it was intended to provide enough revenue to meet the so-called "escrow requirement." Thus, the Commission, if it was going to accept the settlement proposal, faced unusual constraints on its ability to fine-tune the relationship between "total estimated income" and "total estimated costs" as compared with the steps that the Commission typically employs in order to comply with the so-called "breakeven requirement" of 39 U.S.C. §3621.

Second, under section 12 of the Settlement Agreement, all parties (including the Postal Service) ". . . agree that, in any future proceeding, adherence to this agreement is not intended to constitute or represent agreement with, . . . the application of any rule or interpretation of law, that may underlie, or be thought to underlie, this Stipulation and Agreement." I have been advised by legal counsel that, accordingly, the Postal Service should not be arguing in the current proceeding that the relationship between "total estimated income" and "total estimated costs" reflected in the Commission's Recommended Decision in R2005-1 has any relevance whatsoever to a proper application of the provisions of Section 3621 in this or any other case.

For all of these reasons, it is my view that the extent of "breakeven" in R2005-1 is irrelevant to this case.

**RESPONSE OF WITNESS BUC TO INTERROGATORIES OF
THE UNITED STATES POSTAL SERVICE**

USPSIDMA-TI-39. Please refer to your response to USPS/DMA-T1-26. Please reconcile your recommendation in the current Docket that the contingency be reduced to zero, when equity is estimated to be 2.9 percent of the revenue requirement, with the Commission's recommended 4.0 contingency in Docket R76-1, when test year equity was estimated to be \$363 million or 2.6 percent of the revenue requirement. Please note and consider in your reconciliation that the equity to revenue requirement relationship proposed by the Postal Service in this Docket is a very similar to the equity to revenue requirement relationship recommended by the Commission in the cited docket.

Response

I see nothing to reconcile. Equity is only one factor the Commission considers in determining the proper size of the contingency, and in your question you have not provided a comparison of the evidence in the R76-1 and R2006-1 records relevant to this issue. For example, what was the level of the Commission's confidence in the USPS forecasts in R76-1 as compared with the level of its confidence in the USPS forecasts in this proceeding?

1 CHAIRMAN OMAS: This brings us to oral
2 cross-examination.

3 One participant has requested oral cross-
4 examination, the United States Postal Service, Mr.
5 Reiter.

6 MR. KEITER: Good morning, Mr. Chairman,
7 Commissioners.

8 CROSS-EXAMINATION

9 BY MR. REITER:

10 Q Good morning, Mr. Buc.

11 A Good morning, Mr. Reiter.

12 Q There's a library reference, DMA Library
13 Reference 1, that you cite and rely on in your
14 testimony. Is that incorporated as part of your
15 testimony?

16 MR. REITER: Perhaps we should wait for your
17 counsel.

18 THE WITNESS: I believe that it is.

19 MR. REITER: I'll repeat that. I was asking
20 if the library reference, DMA-LR-1, is incorporated as
21 part of Mr. Buc's testimony?

22 MR. ACKERLY: Yes, it is.

23 MR. REITER: Because that wasn't mentioned
24 in your testimony.

25 MR. ACKERLY: I stand corrected. Yes.

1 MR. REITER: That's fine. I just wanted to
2 be sure before I went ahead and asked him questions
3 about it.

4 BY MR. REITER:

5 Q Do you have that with you?

6 A I do.

7 Q I'd like to direct your attention to Tab 8,
8 which you cite on now page 15 of your testimony, the
9 top paragraph. I also have copies of that worksheet
10 for the Commissioners or anyone else who doesn't have
11 it handy.

12 This worksheet is entitled Analysis of USPS
13 Cashflows and Equity. Is that correct, Mr. Buc?

14 A No. I think Tab 8 is Comparative Analysis
15 of USPS Revenue Requirement Requests.

16 Q Okay. Maybe I have the wrong tab number.
17 Do you recognize the page that you were just handed?

18 A I believe this is Tab 9.

19 Q Tab 9. I stand corrected. Let's look at
20 Tab 9 then.

21 There I believe you are calculating the
22 Postal Service's cash balance at the end of the test
23 year in this case. Is that correct?

24 A That's correct.

25 Q And in doing that the last step, if we're

1 looking at **R2006-1** there, is that you subtract out the
2 balance in the restricted escrow account. Is that
3 correct?

4 A That's correct.

5 Q And the source that you give for the amount
6 you show, which is **\$6.256** billion, is Postal Service
7 Witness Loutsch's Exhibit **6-G**. Is that correct?

8 A Yes, it is.

9 Q Do you happen to have a copy of that?

10 A I don't.

11 Q We have some for everyone. The title of
12 that exhibit is Investment Income. Do you see that?

13 A Yes.

14 Q And is it your understanding that the
15 purpose of this exhibit is to calculate interest that
16 the Postal Service earns on its cash and on the escrow
17 account? Is that right?

18 A Yes.

19 Q And that exhibit shows that for the test
20 year the interest on the escrow account was **\$297**
21 million approximately. Do you see that?

22 A I do.

23 Q And that was calculated on a cumulative
24 balance in the test year of **\$6.256** billion
25 approximately, right?

1 A That appears to be correct.

2 Q Do you know when each year the Postal
3 Service makes its deposit into the escrow account?

4 A I believe it's the last day of the fiscal
5 year.

6 Q The last day? What part of the last day?
7 Do you know?

8 A If I were the Postal Service, I might
9 suspect it might be the last minute of the last day,
10 but I'm not certain.

11 Q I believe you're correct. Let's go with
12 that very wise assumption.

13 So if the amount in the escrow fund is \$6
14 billion at the beginning of fiscal year '08 and the
15 payment for '08 to bring the fund up to the required
16 \$9.8 billion is not made until the last minute of the
17 year, which figure would you expect the Postal Service
18 to use to calculate the interest earned for the fiscal
19 year, the \$6 billion that was in the account all year,
20 or the \$9.8 billion that was in the account for the
21 last microsecond?

22 A I don't know exactly how the Postal Service
23 made this calculation. I'd have to go back and look.
24 It might seem to me that -- I'm just not sure.

25 Q If you were the bank and a depositor had

1 \$300 in all year and then put \$300 in the last second,
2 would you pay that person interest on \$600 for the
3 whole year?

4 A I wouldn't

5 Q so we can presume that in calculating
6 interest on the escrow the right figure to use would
7 be the amount that was in all year, which represented
8 the total as of 2007 that was required?

9 A Yes.

10 Q But in a financial statement that reported
11 the escrow balance for '08 you would expect to see the
12 full amount of \$9.8 billion, would you not?

13 A Yes.

14 Q You probably don't have this in front of
15 you, although I do have copies. I'm not sure I need
16 this. Let's hold off.

17 If we go back to your Tab 9, it would be
18 appropriate since you're trying to calculate the test
19 year final numbers here where you subtract the escrow
20 amount to use the \$9.843 billion instead of your
21 \$6.256 billion?

22 A It depends on what the purpose of the
23 analysis is. If the purpose is to show what the cash
24 looks like during the year, assuming everything else
25 is right, this is what the cash would look like during

1 the year.

2 If the purpose is to show what the cash
3 looks like in the last second, then you're right. You
4 would probably subtract the larger number.

5 Q Aren't all the figures that we try to figure
6 out in these cases for the end of the year?

7 A I don't think that's necessarily correct.

8 Q Well, in a financial statement.

9 A The number for accrued cost or accrued
10 income are always accruals, but there are other
11 purposes for which people look at cashflows.

12 For instance, Witness Loutsch was fairly
13 clear on the fact that he thought that equity was not
14 the right sort of number to use when thinking about
15 the Postal Service's financial reserves. He thought
16 cash was the right sort of number to use. In that
17 sort of sense this would be the cash that would be
18 available during the year.

19 But if we're trying to true things up at the
20 end of the year, and this is shown actually on --
21 maybe I will show you this page, which is from Library
22 Reference 50, Postal Service Library Reference 50.
23 It's on page 271. This is our estimate of the
24 statement of cashflow.

25 A Accruals and cash are used for two different

1 purposes, and they are two different accounting
2 conventions.

3 People very often talk about the fact that
4 cash shows what you have on hand, what you can pay
5 out, how well you could withstand something -- I
6 believe that was Witness Loutsch's point -- where
7 accrual is just a different concept from an accounting
8 perspective.

9 Q Right, but I'm just talking about the cash
10 here.

11 A Right. Well, what I presented is kind of on
12 a cashflow basis, not an accrual basis.

13 Q Right.

14 A A cash balance is a cash balance to me on a
15 cash basis, not an accrual basis, and that's the
16 number that I've presented.

17 Q But do you think it's accurate to say that
18 the Postal Service's cash balance in test year after
19 rates would still be that \$4 billion figure you have
20 when at the end of the year there's only going to be
21 \$1 billion?

22 A On a cash basis except for that last
23 microsecond, I think that I would say that. That's
24 their cash balance according to the way I've
25 calculated it during the year, yes.

1 Q So even though all those other figures that
2 you subtract that from are end of the year figures,
3 you think it's all right to --

4 A No, no. I think those other figures are
5 cash figures. This is a cash basis that your
6 available cash is calculated on, so I kept it on a
7 cash basis, which I think is the right way to think
8 about it if you're thinking about what sort of buffer
9 it provides against an adverse event.

10 Q Those are the cash balances at the end of
11 the year, aren't they?

12 A Yes.

13 Q Okay. Would you look at your answer to our
14 Interrogatory 35, please?

15 A I've got it.

16 Q There you use the term natural experiment.

17 A Yes.

18 Q Do you see that?

19 A Yes.

20 Q Is that a term of art that I'm not familiar
21 with, or is it a term you coined?

22 A It's certainly not a term that I coined.
23 It's a term that many people use to talk about
24 watching what goes on in the world.

25 It's not a controlled experiment. It's not

1 something where you set it up and do all the things
2 that you would do in a controlled, but the world
3 happens, you see what happens with it, and you use
4 those results as a natural experiment. It's a fairly
5 commonly used sort of term.

6 Q So it's real life?

7 A Yes.

8 Q There we asked you to look at some figures
9 over time that showed that there had been a 5.2
10 percent reduction in hours as a result of these
11 programs, cost reduction programs. I'm sorry. A 9.7
12 reduction in overall cost, but only a 5.2 percent
13 reduction in supervisor costs.

14 If that was real life, if that was a natural
15 experiment, then wouldn't that lead you to draw a
16 conclusion other than those things go down one-for-one
17 over time?

18 A First of all, as a clarification it wasn't a
19 9.7 percent reduction in all hours. If you recall, we
20 excluded the supervisory hours and the postmaster
21 hours.

22 Q The craft hours then.

23 A Right.

24 Q All right. So that's the craft hours, which
25 went down almost twice as fast as supervisory hours.

1 A In that time period, that's correct. You
2 asked me what I considered, if that shows that there's
3 one-for-one.

4 It's hard to do a controlled experiment in
5 this area. I'd like to. I'd like to get in and let
6 the Postal Service have me fiddle with the supervisors
7 and the cost reductions, and I'd like to hold
8 everything else constant. That would be a wonderful
9 experiment.

10 I can't do that experiment, and you're
11 unwilling to do it also for obvious reasons. All you
12 can do is observe the world, and the world often
13 doesn't have corrections for little things. It's not
14 a well controlled experiment.

15 I take the fact that they move together over
16 long periods of time to be a natural experiment, which
17 shows me that they are related.

18 Q Do you believe the Postal Service believes
19 they're not related?

20 A I think the Postal Service believes that
21 they're related in ways slightly different than the
22 way I believe that they're related.

23 Q Well, maybe the Postal Service believes
24 they're related in the proportion over at least this
25 time period of 9.7 to 5.2, and I think your position,

1 if I understand it, is that they're one-to-one, or at
2 least should be calculated that way in the absence of
3 a controlled experiment.

4 A I can only speak for myself. I can't really
5 tell you what the Postal Service believes.

6 This is just another point that I have for
7 affirming my position that the costs are one-for-one.
8 This isn't the only point, but it is a supporting
9 position. I don't rely on this exclusively to come to
10 my conclusion.

11 Q Would you look at your answer to our
12 Interrogatory 22, please?

13 A I've got it.

14 Q That question discusses application of
15 judgment to the statutory standard of break even. Is
16 that right?

17 A It does.

18 Q You provide your opinion, and I'm
19 paraphrasing here, so correct me if I'm wrong, but
20 while there is no bright line in matters of judgment
21 such as this, nevertheless your judgment is that a
22 projected net test year surplus of \$173 million is
23 clearly over the bright line, which I think you said
24 doesn't exist. Is that a fair reading, humor aside?

25 A The Act says as nearly as practicable. \$173

1 million surplus, or deficit, by the way, doesn't seem
2 nearly as practicable and so it seems to me that
3 wherever that bright line gets drawn this is far to
4 the other side of that bright line.

5 Q If you were drawing bright lines or not so
6 bright lines, where would you draw it? Would \$150
7 million be better? \$100 million? Less than \$100
8 million?

9 A Bright lines are pretty hard to draw, but,
10 you know, twice the Postal Service has gotten to
11 within \$1 million of break even. I think that's
12 pretty good.

13 Q So you're comfortable with that?

14 A If somebody were to set it at \$10 million
15 would I say oh, my goodness; this is outrageous? No,
16 I wouldn't say that.

17 I believe we showed in testimony what the
18 percentages are. You might look at those percentages,
19 see how close you're able to get in the past as a
20 percentage of the revenue requirement. Maybe that
21 informs your judgment on what you should shoot for
22 this time. \$173 million seems pretty big.

23 Q If you accept my math, and you're certainly
24 welcome to check it later and contradict it, that's
25 about .2 percent of the total revenue requirement?

1 Does that seem right? \$173 million over \$75 billion?

2 A That is correct. .222 I think we said in
3 testimony when we calculated out the numbers.

4 Q So if you get below \$100 million then you're
5 close to .1 percent?

6 A Well, you are closer, yes.

7 Q Yes. And you feel that's a better ratio?

8 A I think that's a better ratio. I'm not sure
9 that looking at the past where the numbers look like
10 .083, .082, .047, that even if you were at .1 that I
11 would say that's as nearly as practicable.

12 People have gotten much closer in the past,
13 and it seems to me that what the statute says is to
14 get as close as practicable.

15 Q You made reference earlier, and I did want
16 to ask you this, to a net deficit of \$173 million.
17 Would you argue in that instance that it should be
18 trued up close to zero?

19 A I might not have a client who would ask me
20 to put on testimony, but if you asked my opinion I
21 would say yes, it should be. A deficit of \$173
22 million or a surplus of \$173 million both seem to me
23 to not be as close to break even as practicable.

24 Q We'll look forward to that perhaps in the
25 future. Thank you for your candor.

1 Would you look at your answer to our
2 Question 14, please?

3 A I've got it.

4 Q There we asked you what effect the higher
5 net deficiency that's indicated in the Postal
6 Service's integrated financial plan for fiscal year
7 '07 should have on the contingency provision in this
8 case, and you replied in part, and correct me if I
9 mischaracterize your answer, that you don't believe
10 that IFP projections should be substituted for the
11 rate case estimates.

12 I don't think that's exactly what we asked
13 you. We weren't suggesting that they be substituted,
14 but were simply trying to get your opinion as to what
15 effect consideration of the fact of a less favorable
16 budget should have on the analysis of an appropriate
17 contingency provision.

18 Let me ask you a slightly different question
19 or make it clear. Does a budget projection for '07
20 that is less favorable than the rate case projection
21 for '07 provide more support or less support for your
22 proposed zero contingency, or doesn't it make a
23 difference?

24 A I'm not sure that it makes a difference to
25 the extent that it's not tested and not gone through

1 in the same way that a rate case estimate is.

2 Q Look back to your response to Question 13.
3 I believe there you suggested that both adverse and
4 positive developments should be considered by the
5 Commission.

6 A I agree with that.

7 Q And wouldn't this be one? Not suggesting
8 that the numbers be substituted, but that the facts of
9 the existence of this budget be considered.

10 A It seems to me that at the time that the
11 year is over and you true up for whatever true ups go
12 on if in fact that's what happens that you true up for
13 events that you've known that have occurred, and then
14 the Commission is in the position of having to go
15 through, if they're going to go this direction, of
16 thinking about what all those other factors are that
17 influence the roll forward.

18 If they decide to do that sort of a true up,
19 they should think about what those factors are. If
20 you predicted that oil prices are going to be \$5 a
21 gallon and it actually turns out that now a better
22 estimate is \$1.50, that should be reflected.

23 If it turns out that inflation is higher
24 than we thought it would be, perhaps that should be
25 reflected also. I'm a fairly big believer in symmetry

1 in these things.

2 If there are things that underlie the
3 integrated financial plan and it's different because
4 things have changed materially and the Commission
5 decides that it's going to look at the roll forward
6 and do something with it then I think if things have
7 changed materially and that affects your integrated
8 financial plan if it also affected the roll forward
9 they might take account of that. Sure.

10 Q Thank you for that clarification. You
11 testified on the revenue requirement in Docket No.
12 R2000-1, correct?

13 A I believe that I did, yes.

14 Q I believe we had some conversations then as
15 well.

16 A I believe we did.

17 Q Do I recall correctly that your testimony
18 included an extensive discussion of the contingency
19 provision in light of the historical analysis of the
20 variance in estimated and actual costs?

21 A I don't think that I -- I don't have it in
22 front of me, and I don't recall a huge section on the
23 variance analysis.

24 Q Well, it's all relative. I looked back at
25 it, and there were about 14 pages where you discussed

1 the contingency provision, and the variance analysis
2 was certainly **discussed** in several pages.

3 A Could you refresh my memory as to how many
4 pages I talked about variance analysis?

5 Q Off and on throughout the 14. I did one of
6 the searches, and I got a long list of references for
7 variance analysis.

8 It doesn't really matter how many pages,
9 although you thought in that testimony that it was
10 very significant that Mr. Tayman only dedicated three
11 pages to the provision for contingency. DO you
12 remember making that --

13 MR. ACKERLY: Mr. Chairman, with respect, I
14 do need to object at this point. Counsel is
15 testifying in effect or trying to bring into the
16 record of this proceeding testimony that Mr. Buc
17 apparently made in another proceeding.

18 We don't have copies of that, and I object
19 to counsel's characterization of Mr. Buc's testimony
20 in a prior proceeding.

21 Now, if he'd like to set the stage for a
22 clear question based on the testimony in this
23 proceeding I have no objection, but to try to bring in
24 evidence from a prior proceeding into this one I think
25 is improper.

1 MR. REITER: Yes. I wasn't trying to bring
2 in evidence. I'll reword the question and go on as
3 Mr. Ackerly suggests, Mr. Chairman.

4 CHAIRMAN OMAS: Thank you, Mr. Reiter.

5 BY MR. REITER:

6 Q Back to this case. Did you happen to
7 calculate the variance in cost and revenue between the
8 estimates for '06 that were projected in the last rate
9 case and the actual?

10 A No, I didn't.

11 Q Have you looked at those figures at all?
12 Certainly you've looked at the figures?

13 A I actually didn't look very closely because
14 this is a slightly different analysis of the
15 contingency.

16 This analysis looks at the Postal Service's
17 ability to withstand adverse outcomes rather than
18 looking at the probability or the magnitude of those
19 adverse outcome themselves, so I actually did not
20 spend very much time at all looking at the variance
21 analysis.

22 Q Could you state the difference again? I
23 didn't get that.

24 A Yes. In this case I mainly focused on the
25 fact that the Act says and the Commission itself -

1 not the Act. The Commission itself has said that it
2 looks at two different things.

3 It looks at the things that influence
4 whether or not there's going to be an adverse
5 outcome -- the Postal Service estimated how big is
6 that adverse outcome -- but that they also look at in
7 thinking about the contingency the ability of the
8 Postal Service to deal with the consequences of an
9 adverse outcome.

10 In this case my testimony focuses largely on
11 that second point. How able is the Postal Service to
12 cope with any possible adverse outcome, not what size
13 the adverse outcome might actually be.

14 Q Would it be fair to say that your position
15 is now closer to what the Postal Service's position
16 has always been; that the historical variance analysis
17 tells you less about what we can withstand in the
18 future than perhaps the Commission had thought?

19 A I wouldn't say that. I just said that what
20 I really looked at was your ability to cope with an
21 adverse outcome. What would happen if there actually
22 were an adverse outcome? How would that affect you
23 rather than how big it's going to be.

24 The fact that I didn't look at the variance
25 analysis doesn't mean that I necessarily agree with

1 your position, no. It's just not within the work that
2 I did in this particular case.

3 MR. REITEK: Fair enough. That's all the
4 questions I have, Mr. Chairman.

5 CHAIRMAN OMAS: Thank you, Mr. Reiter.

6 Is there any other follow-up cross-
7 examination for Witness Buc?

8 (No response.)

9 CHAIRMAN OMAS: Are there any questions from
10 the bench? Commissioner Goldway?

11 COMMISSIONER GOLDWAY: In your testimony,
12 Mr. Buc, you were focusing to some degree on the
13 assets carried by the Postal Service in their real
14 estate portfolio and the fact that book value --

15 THE WITNESS: Yes.

16 COMMISSIONER GOLDWAY: -- did not relate to
17 market value.

18 I wonder whether in looking at the market
19 value and the ability of the Postal Service to use its
20 real estate resources without necessarily buying and
21 selling them you considered the concept of air rights
22 and the value of air rights, which in some cities may
23 add up to hundreds of millions of dollars.

24 THE WITNESS: I'm familiar with the concept.
25 I believe the Postal Service actually does that

1 occasionally. I don't address that in my testimony,
2 but you are correct that there is value in air rights.

3 COMMISSIONER GOLDWAY: My staff assistant
4 reminds me there is value just in the question of
5 placing antennas.

6 THE WITNESS: That's also correct, yes.

7 COMMISSIONER GOLDWAY: So there is revenue
8 value in real estate in addition to the market value
9 should they sell it?

10 THE WITNESS: There's a stream of revenue
11 that one could derive past the market value from sale.
12 That's correct.

13 COMMISSIONER GOLDWAY: Thank you.

14 CHAIRMAN OMAS: Mr. Ackerly?

15 MR. ACKERLY: If I may have just a brief
16 moment with the witness, Mr. Chairman, please?

17 CHAIRMAN OMAS: Why don't we just sort of go
18 about five minutes, and then we'll come back, okay?

19 (Whereupon, a short recess was taken.)

20 CHAIRMAN OMAS: Mr. Ackerly?

21 MR. ACKERLY: Mr. Chairman, we have nothing
22 further for the witness.

23 However, I would like to be sure that the
24 record is clear, and therefore would like to move into
25 evidence the library reference that was mentioned

1 earlier, DMA-LR-1.

2 CHAIRMAN OMAS: Without objection. So
3 ordered.

4 MR. ACKERLY: Thank you, Mr. Chairman.

5 CHAIRMAN OMAS: Mr. Buc, that completes your
6 testimony here today. We appreciate your appearance
7 and your contribution to our record. You are now
8 excused. Thank you very much.

9 THE WITNESS: Thank you very much.

10 CHAIRMAN OMAS: Have a good day.

11 (Witness excused.)

12 CHAIRMAN OMAS: Mr. Miles?

13 MR. MILES: Good morning, Mr. Chairman and
14 members of the Commission. John Miles on behalf of
15 ValPak.

16 I call Robert W. Mitchell to the stand,
17 please.

18 CHAIRMAN OMAS: Would you remain standing,
19 Mr. Mitchell? Would you raise your right hand?

20 Whereupon,

21 ROBERT W. MITCHELL

22 having been duly sworn, was called as a
23 witness and was examined and testified as follows:

24 CHAIRMAN OMAS: Please be seated.

25 //

1 DIRECT EXAMINATION

2 (The document referred to was
3 marked for identification as
4 Exhibit No. VP-T-3.)

5 BY MR. MILES:

6 Q Please state your name for the record.

7 A My name is Robert W. Mitchell.

8 Q Mr. Mitchell, I'm handing you two copies of
9 a document previously filed in this case. Would you
10 take a look at that, please?

11 A Yes. I recognize this.

12 Q Mr. Mitchell, the document is labeled Direct
13 Testimony of Robert W. Mitchell Concerning Fairness
14 and Costing Submitted on Behalf of the Valpak
15 Companies designated VP-T-3 and dated September 6,
16 2006. Is that correct?

17 A Yes.

18 Q Was the document prepared by you or under
19 your direction and control?

20 A Yes, it was.

21 Q Do you have any edits to the document?

22 A I'm sorry to say we have found two very
23 small edits that need to be made.

24 Q Could you say what pages?

25 A On page 8, line 17, there is an extraneous

1 word. The word "use", U-S-E, is extraneous, and we
2 have X'd it out on this copy.

3 Q On Loth copies?

4 A On both copies.

5 Also, on page 11 we let a grammar error slip
6 through. On line 8 of page 11 both the word "argue"
7 and the word "explain" should be plural, so we have
8 put Ss on both of those on both copies.

9 My understanding is that we need to file a
10 final version which has these corrections in it, which
11 we will do electronically.

12 Q As corrected, do you adopt the document as
13 your testimony in this case?

14 A Yes.

15 MR. MILES: Mr. Chairman, we move the
16 document in evidence.

17 CHAIRMAN OMAS: Is there objection?

18 (No response.)

19 CHAIRMAN OMAS: Hearing none, I will direct
20 counsel to provide the reporter with two copies of the
21 corrected direct testimony of Robert W. Mitchell.

22 That testimony is received into evidence.

23 As is our practice, it will not be transcribed.

24 //

25 //

1 (The document referred to,
2 previously identified as
3 Exhibit No. VP-T-3, was
4 received in evidence.)

5 CHAIRMAN OMAS: Mr. Mitchell, have you had
6 an opportunity to examine the packet of designated
7 written cross-examination presented to you this
8 morning?

9 THE WITNESS: Yes, I have.

10 CHAIRMAN OMAS: If those questions contained
11 in that packet were proposed to you today orally,
12 would your answers be the same as those you provided
13 previously in writing?

14 THE WITNESS: Yes, they would.

15 CHAIRMAN O W : Are there any corrections or
16 additions you would like to make to those answers?

17 THE WITNESS: No.

18 CHAIRMAN O W : Counsel, would you please
19 provide two copies of the corrected designated written
20 cross-examination of Witness Mitchell to the reporter?

21 That material is received into evidence and
22 is to be transcribed into the record.

23 MR. MILES: Yes, Mr. Chairman.

24 CHAIRMAN OMAS: Thank you.

25 //

1 (The document referred to was
2 marked for identification as
3 Exhibit No. VP-T-3 and was
4 received in evidence.)

5 //

6 //

7 //

8 //

9 //

10 //

11 //

12 //

13 //

14 //

15 //

16 //

17 //

18 //

19 //

20 //

21 //

22 //

23 //

24 //

25 //

BEFORE THE
POSTAL RATE COMMISSION
WASHINGTON, DC 20268-0001

Postal Rate and **Fee** Changes, 2006

Docket No. R2006-1

DESIGNATION OF WRITTEN CROSS-EXAMINATION
OF VALPAK DIRECT MARKETING SYSTEMS, INC. AND
VALPAK DEALERS' ASSOCIATION INC.
WITNESS ROBERT W. MITCHELL
| (VP-T-3)

Party

Interroaatories

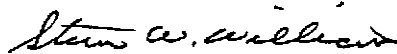
Advo, Inc.

ADVONP-T3-1-2
USPS/VP-T3-1-2

Postal Rate Commission

ADVO/VP-T3-1
USPSNP-T3-1-2

Respectfully submitted,



Steven W. Williams
Secretary

INTERROGATORY RESPONSES OF
VALPAK DIRECT MARKETING SYSTEMS, INC. AND VALPAK
DEALERS' ASSOCIATION INC.
WITNESS ROBERT W. MITCHELL (T-3)
DESIGNATED AS WRITTEN CROSS-EXAMINATION

Interrogatory

ADVO/VP-T3-1
ADVO/VP-T3-2
USPS/VP-T3-1
USPS/VP-T3-2

Designating Parties

Advo, PRC
Advo
Advo, PRC
Advo. PRC

Response of Valpak Witness Mitchell
to Interrogatory of Advo, Inc.

ADVOIVP-T3-1.

On page 20 (lines 4-10), you state:

“Quite aside from the Ramsey formulas, a notion of cross subsidy has evolved. The reasoning has been that if the presence of product D causes the price of product C to be higher than it would otherwise be, then product C is subsidizing product D. The test to determine whether such a cross subsidy exists is to estimate the incremental cost of product D, and if the revenue from product D is not covering this incremental cost, then the extent of cross subsidy is taken to be the revenue shortfall, based on these numbers.”

- (a) Please confirm that product D’s incremental cost is the total postal system cost saved if that product is eliminated, including any cost savings from other products in the system (such as C) that are generated when product D is eliminated. If you cannot, please explain fully why not.
- (b) Please confirm that if a product’s revenues cover its incremental postal system cost, then it is not being subsidized. If you cannot, please explain fully why not.
- (c) Please confirm that if product C’s revenues do not exceed the postal system costs to produce only product C (exclusive of any other postal products and services), then that product is not subsidizing any other. If you cannot, please explain fully why not.

Response:

- (a) Confirmed, generally. The thought process is that when product D is withdrawn in its entirety, the Postal Service adjusts fully toward producing the remaining products in an efficient, well-designed system, and the difference in cost is estimated. Within the new system, the total marginal cost of product C would equal its marginal cost times its volume.¹ I know of no basis for predicting whether the marginal cost of

¹ It is convenient to define *total marginal cost* as marginal cost times volume. It is equal, then, to volume variable cost.

**Response of Valpak Witness Mitchell
to Interrogatory of Advo, Inc.**

product C in the new system would be higher or lower than the marginal cost of product C in the former system.

When the incremental cost of product D is estimated, it is not generally possible to say whether some of that cost belonged in any sense to another product. I agree that if the total marginal cost of product C declines when product D is removed and if the total cost of the postal system is lower *pari passu*, it might make sense to argue that *some* costs formerly attributed to product C are part of the incremental costs of product D. One condition under which this could occur is where fixed and non-adjustable capacity constraints contributed to high marginal costs **for** product C in the former system but not in the new system.

- (b) Confirmed.
- (c) Not confirmed. In a breakeven system that is subsidy free, defined on the incremental cost of each product individually (as you suggest in part (b)) and the incremental costs of all possible groups of products, we know that the revenue from product C is less than or equal to its stand-alone cost (which is the cost you define in part (c)), **but**, assuming it is less, we do not know how much less. It is possible for the revenue from product C to **be** below its stand-alone cost while the revenue from some other product **is** below its *incremental* cost. In **such** a case, the other

Response **of Valpak** Witness Mitchell
to Interrogatory of Advo, Inc.

product would be receiving a subsidy. It may not be possible to identify a specific product that is providing the subsidy to the *other* product, but product C is certainly a member of the group that would be

Response of Valpak Witness Mitchell
to Interrogatory of Advo, Inc.

ADVO/VP-T3-2.

On page 10, you cite the Ramsey pricing formula as a situation case where cross-subsidies are permitted and are not considered "bad." Please describe the circumstances where the Ramsey formula would permit cross-subsidies and explain precisely why "... the welfare of the nation is higher with this thing called a cross subsidy than without it. ..."

Response:

I am not sure I can explain *all* of the circumstances in which Ramsey prices could involve cross-subsidies, but the general notion is rather simple. Unless one (or more) of the products is perfectly inelastic, the Ramsey formulas always yield prices that are above marginal costs. However, if the elasticity of a product is relatively high, the distance between its rate and its marginal cost can be small. In such a case, it is entirely possible that the incremental cost of the product (which can include fixed costs) is larger than the total marginal cost, where *total marginal cost* is defined as marginal cost times volume. If the incremental cost exceeds the total marginal cost, and the price is not far above the marginal cost, it is easy for the revenue to be less than the incremental cost, which is the definition of cross-subsidy. None of this adds to or detracts from the Ramsey formulas, or has anything to do with whether the Ramsey prices really are economically efficient — they are because they were designed to be.

Response ~~of~~ **Valpak** Witness Mitchell
to Interrogatory **of** the United States Postal Service

USPS/VP-T3-1.

Please refer to pages 9-11 of your testimony. There you indicate that Ramsey Pricing does not automatically ensure that prices are free of cross-subsidization. You also state that the “argument that cross subsidies are **bad** and should be avoided is a fairness argument, not an economic one,” and that “[n]othing in notions relating to the efficiency of resource allocation argue that cross subsidies are bad or explain how to avoid them.” VP-T-3 at 10-11. Please refer to ~~the~~ previous testimony of Prof. Panzar on this subject, USPS-T-11 at 8-12 (Docket No. R97-1), where he concludes (pg. **11**) that “in addition to their intuitive fairness properties, there are important efficiency reasons for the Postal Service to attempt to set rates that are free of cross-subsidy.” Please discuss why or why not his testimony is inconsistent with your assertions as quoted above.

Response:

I **do** not see ~~an~~ inconsistency, as it is not a focus on achieving economic efficiency that leads to the cross-subsidy test. However, Professor Panzar does add an important complement to the argument that cross subsidies should be avoided.

A widely recognized prescription is that regulators should **seek** to bring about cost-based rates of the kind unrestrained competition would tend to generate if competition were practicable. Professor Panzar points out that if one product is priced below its incremental cost, then the other products as a group are priced above their stand-alone cost, and that this is not a condition that could survive in a competitive system, for competitors would compete successfully for the other products, which could qualify as inefficient entry.

Response **of** Valpak Witness Mitchell
to Interrogatory **of** the United States **Postal** Service

USPS/VP-T3-2.

Your testimony (e.g., page 11, lines 15-18) appears to be premised on the presumption that the Postal Service's operational treatment of saturation letters is caused by the presence of saturation flats. Please confirm that your fairness concerns do not apply if the policy of maximizing DPS processing of saturation letters were independent of the existence of saturation flats. If not confirmed, please explain fully.

Resoonse:

The question you raise is an interesting one. Suppose no saturation flats exist and the Postal Service is analyzing the costs of alternative ways of accomplishing the delivery of saturation letters. It sees itself as having two options. Option A involves handling the letters as extra bundles and has a cost of 3 cents per piece. Option B involves DPSing the letters (and taking them out as part of a tray of DPS'd letters) and **has** a cost of 5 cents. (Assume it is clear that DPSing the letters costs **less** than casing them.) The question becomes: Acknowledging that extra bundles have been standard operating procedure for some years, does the Postal Service have the right and the freedom to decide that it has a preference against extra bundles and therefore that the only service it will offer **is** the higher-cost 5-cent service - *i.e.*, to select an operating system that is not efficient in the cost-minimizing sense? I contend that it does not. However, if that decision is made, then I agree that the fairness questions I raise would not arise. The analysis needs to be done.

1 CHAIRMAN OMAS: There were no requests for
2 oral cross-examination of Witness Mitchell.

3 Does any participant have any questions at
4 this point in time?

5 (No response.)

6 CHAIRMAN OMAS: Are there any questions from
7 the bench?

8 (No response.)

9 CHAIRMAN OMAS: There doesn't seem to be
10 any, Mr. Mitchell. Therefore, we thank you very much
11 for your appearance today, and we appreciate your
12 testimony and your contribution. You are now excused

13 THE WITNESS: Thank you.

14 CHAIRMAN OMAS: Thank you.

15 (Witness excused.)

16 CHAIRMAN OMAS: Ms. Dreifuss, would you
17 identify --

18 MS. DREIFUSS: Good morning, Mr. Chairman.
19 OCA's witness, J. Edward Smith, is going to take the
20 stand now.

21 Rand Costich will handle the administrative
22 tasks this morning for OCA.

23 CHAIRMAN OMAS: I see you were sitting there
24 by your lonesome.

25 MS. DREIFUSS: Now I'm not so lonely. Rand

1 has come up to the table

2 CHAIRMAN OMAS: Mr. Smith, would you raise
3 your right hand?

4 Whereupon,

5 J. EDWARD SMITH

6 having been duly sworn, was called as a
7 witness and was examined and testified as follows:

8 CHAIRMAN OMAS: Please be seated.

9 Mr. Costich?

10 MR. COSTICH: Thank you, Your Honor.

11 DIRECT EXAMINATION

12 (The document referred to was
13 marked for identification as
14 Exhibit No. OCA-T-3.)

15 BY MR. COSTICH:

16 Q Mr. Smith, do you have before you a document
17 identified as OCA-T-3?

18 A I do.

19 Q Is that your direct testimony in this
20 proceeding?

21 A Yes, it is.

22 Q Was the document prepared by you or under
23 your supervision?

24 A Yes, it was.

25 Q Do you adopt it as your testimony in this

1 proceeding?

2 A I do.

3 Q Are there any corrections to be made?

4 A No, there are not.

5 MR. COSTICH: Mr. Chairman, I move the
6 admission of OCA-T-3.

7 CHAIRMAN OMAS: Is there any objection?

8 (No response.)

9 CHAIRMAN OMAS: Hearing none, I will direct
10 counsel to provide the reporter with two copies of the
11 corrected direct testimony of J. Edward Smith.

12 That testimony is received into evidence.
13 However, as is our practice, it will not be
14 transcribed.

15 (The document referred to,
16 previously identified as
17 Exhibit No. OCA-T-3, was
18 received in evidence.)

19 CHAIRMAN OMAS: Mr. Smith, have you had an
20 opportunity to examine the packet of designated
21 written cross-examination that was provided to you
22 this morning?

23 THE WITNESS: Yes, I have.

24 CHAIRMAN OMAS: If those questions contained
25 in that packet were posed to you orally today, would

1 your answers be the same as those you provided the
2 Commission previously in writing?

3 THE WITNESS: Yes, they would.

4 CHAIRMAN OMAS: Are there any additions or
5 corrections you would like to make to those answers?

6 THE WITNESS: No, there are no changes.

7 CHAIRMAN OMAS: Counsel, would you then
8 please provide two copies of the corrected designated
9 written cross-examination of Witness Smith to the
10 reporter?

11 That material is received into evidence and
12 is to be transcribed into the record.

13 (The document referred to was
14 marked for identification as
15 Exhibit No. OCA-T-3 and was
16 received in evidence.)

17 //

18 //

19 //

20 //

21 //

22 //

23 //

24 //

25 //

BEFORE THE
POSTAL RATE COMMISSION
WASHINGTON, DC 20268-0001

Postal Rate and Fee Changes, 2006

Docket No. R2006-1

DESIGNATION OF WRITTEN CROSS-EXAMINATION
OF OFFICE OF THE CONSUMER ADVOCATE
WITNESS J. EDWARD SMITH
(OCA-T-3)

Party

Interrogatories

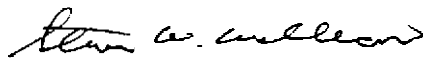
Postal Rate Commission

ADVO/OCA-T3-7, 9, 13, 15, 19-22
MPA/ANM/OCA-T3-2, 6-7, 10, 15-16
USPS/OCA-T3-1, 4-8, 11, 13, 19

United States Postal Service

USPS/OCA-T3-1-23

Respectfully submitted,



Steven W. Williams
Secretary

INTERROGATORY RESPONSES OF
OFFICE OF THE CONSUMER ADVOCATE
WITNESS J. EDWARD SMITH (T-3)
DESIGNATED AS WRITTEN CROSS-EXAMINATION

Interroaatory

Desianating Parties

ADVO/OCA-T3-7	PRC
ADVOIOCA-T3-9	PRC
ADVOIOCA-T3-13	PRC
ADVOIOCA-T3-15	PRC
ADVOIOCA-T3-19	PRC
ADVOIOCA-T3-20	PRC
ADVO/OCA-T3-21	PRC
ADVOIOCA-T3-22	PRC
MPA/ANM/OCA-T3-2	PRC
MPA/ANM/OCA-T3-6	PRC
MPA/ANM/OCA-T3-7	PRC
MPA/ANM/OCA-T3-10	PRC
MPAJANM/OCA-T3-15	PRC
MPA/ANM/OCA-T3-16	PRC
USPS/OCA-T3-1	PRC. USPS
USPS/OCA-T3-2	USPS
USPS/OCA-T3-3	USPS
USPS/OCA-T3-4	PRC. USPS
USPS/OCA-T3-5	PRC. USPS
USPS/OCA-T3-6	PRC, USPS
USPS/OCA-T3-7	PRC, USPS
USPS/OCA-T3-8	PRC. USPS
USPSIOCA-T3-9	USPS
USPS/OCA-T3-10	USPS
USPS/OCA-T3-11	PRC, USPS
USPSIOCA-T3-12	USPS
USPS/OCA-T3-13	PRC, USPS
USPSIOCA-T3-14	USPS
USPS/OCA-T3-15	USPS
USPS/OCA-T3-16	USPS
USPS/OCA-T3-17	USPS
USPS/OCA-T3-18	USPS

Interroaatory

USPSIOCA-T3-19
USPSIOCA-T3-20
USPSIOCA-T3-21
USPSIOCA-T3-22
USPSIOCA-T3-23

Designating Parties

PRC, USPS
USPS
USPS
USPS
USPS

RESPONSE OF OCA WITNESS J. EDWARD SMITH
TO INTERROGATORIESADVO/OCA-T3-6-24

ADVO/OCA-T3-7. On page 6, line 10 you state that: "Density is an output of the process, not an input to the process. Density is ~~determined~~ partly by how the route is designed and partly by the characteristics of the service territory." Please provide your definition of "density" as it applies to city carrier costing.

RESPONSE TO ADVO/OCA-T3-7

Witness Bradley has defined density as delivery points per square mile. He conducts the analysis at the ZIP code level. We do not have a measure of the density on a route, which might be different from the overall density in the ZIP code

RESPONSE OF OCA WITNESS J. EDWARD SMITH
TO INTERROGATORIESADVO/OCA-T3-6-24

ADVO/OCA-T3-9. Given a particular zip code, number of delivery points, and average delivery/collection volume, please explain fully the actions postal management may take to minimize:

- (a) Carrier route miles to be covered (either by driving or by walking)
- (b) Total number of delivery points in the zip code area
- (c) Total zip code area

RESPONSE TO ADVO/OCA-T3-9

(a) It is my understanding that Postal management seeks to minimize cost, not route miles. The reconfiguration of a route would permit whatever mileage the management wished to have.

- (b) This would involve redefinition of the ZIP code area.
- (c) Postal management can redefine ZIP code areas in a manner it thinks best.

RESPONSE OF OCA WITNESS J. EDWARD SMITH
TO INTERROGATORIES ADVO/OCA-T3-6-24

ADVO/OCA-T3-13. On page 15, Table 2, you present results from your recommended CC5 model using R2005-1 Data. These show that coefficients on the small parcel and small parcel squared variables are both negative. Yet on page 10, Table 1, for the recommended CC5 model you indicate a positive marginal time of 3.208 seconds for small parcels

- (a) Please explain fully your interpretation of these results
- (b) If other (non-small parcel) volume values were set to zero in your preferred CC5 model, please confirm that small parcel marginal cost would then be negative. If you do not confirm, please explain fully.

RESPONSE TO ADVO/OCA-T3-13

(a) The full quadratic flexible form mimics the behavior of the "true" functional form in the neighborhood of the means of the variables. In this neighborhood, CC5 unrestricted produces reasonable estimates for marginal cost and elasticity.

(b) Not confirmed because irrelevant The question hypothesizes a situation that pushes the model outside the range of experience. Accordingly, no meaningful response is possible. However, strictly from the viewpoint of an arithmetician one could make the above assertion which, from an econometric viewpoint, is meaningless. but which in terms of arithmetic can be verified.

RESPONSE OF OCA WITNESS J. EDWARD SMITH
TO INTERROGATORIESADVO/OCA-T3-6-24

ADVO/OCA-T3-15. After offering a selection of 24 CCSTS quadratic models, you state on page 15 (lines 5-6): "Whether the effort was also hampered by an inadequate model is unknown."

- (a) Do you believe all of these models were inadequate or possibly inadequate, including the one you recommend (CC5 restricted quadratic)? Please explain why you believe that.
- (b) When did you decide these models were [or were possibly] inadequate - before you ran them or after? Please explain
- (c) Did you have a particular cost model concept in mind when you selected the 24 different models to run? Please explain.
- (d) Please explain fully how you believe econometric model adequacy should be judged.
- (e) Given your statements on pages 4-8 (lines 3 ff) and your criticism of the CCSTS model as being an "Ad-Hoc Equation," (page 8, lines 19-20) do you have suggestions as to how to correctly model the city delivery function? If so, please provide them [sic]

RESPONSE TO ADVO/OCA-T3-15

(a) Yes. I believe this because we need more consideration of the underlying theoretical justification of the modeling effort as well as additional consideration of statistical and econometric issues. However, I believe that the recommended model is the best that can be done at this time and can serve as the basis for decision-making

(b) These models are extensions of witness Bradley's work; my concerns with the overall approach were formulated during my review of his testimony during Docket No. R2005-1. I was initially concerned that his equations were more of an ad hoc nature rather than being based on an effort defined from the modeling of Postal processes. The use of the quadratic forms also seems to be associated with substantial collinearity problems, which apparently cause variable signs to flip from

RESPONSE OF OCA WITNESS J. EDWARD SMITH
TO INTERROGATORIESADVO/OCA-T3-6-24

positive to negative with only minor variations in equation specification. Accordingly, this raises concerns over the degree of credibility for the regressors, impacting one's confidence in the computed volume variabilities.

(c) Yes. First, I did not believe that the use of the density variable was appropriate. Accordingly, any case developed with a density variable was provided solely for purposes of comparison, given that witness Bradley's equations include density variables.

Second, I concluded that what is known as a "three-bundle" approach might be useful for consideration, given that such an approach appears to model street behavior. The three bundles would be DPS, Sequenced Mail, and All Other (other letters and all flats), with parcels being handled separately. Dr. Michael Bradley, Jeff Colvin, and Mary Perkins authored a paper that is relevant to this issue; the paper was presented at the Crew and Kleindorfer conference in Berne in 2006. The authors prohibit any quotations without their permission, so I am unable to provide further details.

Third, I believe that the consideration of parcels—i.e., whether they should include Priority Mail—is important. Priority Mail has shapes that are both of a parcel nature as well as of a flats nature. However, it is not possible to break out the quantities of each shape from the total.

(d) The theory substantiating the models should be stated. Model results should be evaluated in terms of whether the results comport with reality and on the basis of their statistical properties

RESPONSE OF OCA WITNESS J. EDWARD SMITH
TO INTERROGATORIES ADVO/OCA-T3-6-24

(e) My general suggestions have focused on the formulation and specification of a maximization/minimization model that adequately describes the delivery process. I have not yet done so.

RESPONSE OF OCA WITNESS J. EDWARD SMITH
TO INTERROGATORIESADVO/OCA-T3-6-24

ADVO/OCA-T3-19. Please refer to page 21 of your testimony where you acknowledge that collection volume is missing from the DOIS database and therefore is not included as a separate variable in your analysis. With your recommended DOIS model lacking a collection volume variable, please explain fully how collection volume variability should be determined for costing purposes if your DOIS model were accepted.

RESPONSE TO ADVO/OCA-T3-19

DOIS does not have collection volume, and the lack of collection volume is a problem.

First, to the degree that collection volume is similar to delivered volume, one could approach the problem of missing data by using ratios. The other alternatives would be to obtain collection volume in conjunction with DOIS or perform special studies

RESPONSE OF OCA WITNESS J. EDWARD SMITH
TO INTERROGATORIES ADVO/OCA-T3-6-24

ADVO/OCA-T3-20. On page 21, you discuss the fact that the DOIS database does not include collection volume.

- (a) Do the carrier street times included in the DOIS data reflect carrier collection activities? Please explain.
- (b) If an independent volume variable explaining (at least in part) the dependent variable in an econometric model is absent, can't that bias the coefficients for all the remaining independent volume variables? Please explain.
- (c) If the excluded explanatory volume variable (as in (b) above) is positively correlated with the remaining explanatory variables, please confirm that the coefficients on those other volume variables (and the marginal costs derived from them) will be inflated.
- (d) Did you test for correlations between collection volumes and other explanatory variables within the CCSTS database? Please explain.
- (e) Did you test for correlations between density and the other explanatory variables within the CCSTS database? Please explain.

RESPONSE TO ADVO/OCA-T3-20

- (a) It is my understanding that they do.
- (b) That is a possibility.
- (c) Confirmed.
- (d) A review of the correlation matrices between various data items shows correlation between variables.
- (e) I reviewed correlation matrices which measure the correlations between density and the other explanatory variables.

RESPONSE OF OCA WITNESS J. EDWARD SMITH
TO INTERROGATORIES ADVO/OCA-T3-6-24

ADVO/OCA-T3-21. It appears that the DOIS volume data in OCA **LR-L-4** have only one parcel variable and one priority variable (i.e., data do not distinguish among small parcels, SPRs, and large parcels). It also appears that you sum the parcels and Priority Mail volumes together to obtain the values for your "small parcel"/"SPR" variables.

- (a) Do the DOIS carrier street times include time to deliver all types of parcels and Priority Mail? Please explain.
- (b) **Does** the broader DOIS data set from **which** you derived your data set have separable data on parcel types? Please explain.
- (c) Is it your opinion that there is **no** delivery cost difference among the three types of parcel volumes? Please explain.
- (d) Is it your opinion that there is no delivery cost difference between parcels and Priority Mail? Please explain.
- (e) If your responses to (c) and (d) are no, please explain how the specific costs for these different types of volumes will be distinguished.
- (f) Do you believe that your proposed DOIS model variability results are unaffected by the lack of distinguishing among these types of volumes? Please explain.

RESPONSE TO ADVO/OCA-T3-21

- (a) That is my understanding.
- (b) I am not familiar with variables in DOIS beyond those provided by the Postal Service.
- (c) **No.** It is my understanding that there are small parcels, large parcels, and Priority Mail. Some of the Priority Mail volume could be included in either category as well as in the flats category. The question is how the mail is delivered; by putting Priority Mail in the parcels category, one is assuming that this is the most suitable classification.

RESPONSE OF OCA WITNESS J. EDWARD SMITH
TO INTERROGATORIES ADVO/OCA-T3-6-24

- (d) No. Priority Mail was included with other mail based on possible similarities of delivery. A finer breakout would be desirable.
- (e) The result would be an average.
- (f) A finer breakout by shape for Priority Mail would be desirable. One would expect that improved information on Priority Mail and parcel mail shapes would yield different, improved volume variability estimates.

RESPONSE OF OCA WITNESS J. EDWARD SMITH
TO INTERROGATORIESADVO/OCA-T3-6-24

ADVO/OCA-T3-22. It appears that the DOIS volume data in OCA LR-T3-1 do not include data on accountables.

- (a) Do the DOIS carrier street times include time to deliver accountable mail? Please explain.
- (b) Does the broader DOIS data set from which you derived your data set have separable data on accountable volume?
- (b) Is it your opinion that there is no delivery cost for accountables? Please explain.
- (c) If your response to (c) is no, please explain how the specific costs for accountables will be determined.
- (d) Do you believe that your proposed DOIS model variability results are unaffected by the lack of accountable volume data? Please explain.

RESPONSE TO ADVO/OCA-T3-22

- (a) I assume that they do
- (b) I am not aware that it does.
- (c) No. It is clear that there may be a substantial cost in obtaining a customer signature
- (d) A separate study would be needed
- (e) No. However, accountables constitute a relatively small volume of mail

RESPONSE OF OCA WITNESS J. EDWARD SMITH
TO INTERROGATORIES MPA/ANM/OCA-T3-1-25

MPA/ANM/OCA-T3-2. Please refer to the SAS program file ND1 contained in OCA LR L-4.

- (a) On the first page, please confirm that the variable SPR formed for each zip-route-day observation is the sum of PRCL, small and large parcels, and PRI, priority volume. If you cannot confirm, please explain.
- (b) If you do confirm, please explain your rationale for combining parcels and priority mail into a single variable.
- (c) To your knowledge does the priority mail data contained in the DOIS database, which you used to form the SPR variable account for all priority mail handled by the city carrier at delivery points? Please explain fully.

RESPONSE TO MPA/ANM/OCA-T3-2

- (a) Confirmed that SPR is the sum of PRCL and PRI
- (b) The combination was based on the assumption of similarity of handling.
- (c) I have not confirmed this but assume so; the data were provided on a route basis.

RESPONSE OF OCA WITNESS J. EDWARD SMITH
TO INTERROGATORIES MPA/ANM/OCA-T3-1-25

MPA/ANM/OCA-T3-6. Referring to the (OCA LR L-4, Section 3) MEANS Procedure results associated with each of your DOIS model runs:

- (a) Please confirm that there are zip-coded day observations where there are no (cased, automated, or DPS) letters delivered. If you cannot, please explain why not.
- (b) Please confirm that there are zip-coded day observations where there are no (cased or automated) flats delivered.
- (c) Did you do any checking on why there are such observations as in (a) and (b) above? Please explain.
- (d) If you did not check, is that because you believe there are entire zip codes for which there are either zero letters or zero flats delivered in a day? Please explain.

RESPONSE TO MPA/ANM/OCA-T3-6

- (a) Confirmed
- (b) Confirmed
- (c) No Time limitations precluded checking
- (d) See (c)

RESPONSE OF OCA WITNESS J. EDWARD SMITH
TO INTERROGATORIES MPA/ANM/OCA-T3-1-25

MPA/ANM/OCA-T3-7. Referring again to the (OCA LR L-4, Section 3) MEANS
Procedure results associated with each of your DOIS model runs:

- (a) Please confirm that there are zip-code-day observations where there are no curblane deliveries.
- (b) Please confirm that there are zip-code-day observations where there are no central deliveries.
- (c) Please confirm that there are zip-code-day observations where there are no NDCBU deliveries.
- (d) Please confirm there are zip-code-day observations where there are no "other" deliveries.
- (e) Did you do any checking on why there are such observations as in (a) - (d)? Please explain.

RESPONSE TO MPA/ANM/OCA-T3-7

- (a) Confirmed.
- (b) Confirmed
- (c) Confirmed
- (d) Confirmed
- (e) Data for delivery technology denote delivery points, not delivered mail

Accordingly, the checking of delivered mail is identical to the checking required
in MPA/ANM/OCA-T3-6. Please also see subpart (c) of that question

RESPONSE OF OCA WITNESS J. EDWARD SMITH
TO INTERROGATORIES MPA/ANM/OCA-T3-1-25

MPA/ANM/OCA-T3-10. For the DOIS data you used in your **DOIS** models:

- (a) Please list and describe all the quality control procedures you applied in the ReadVolume SAS program in OCA LR L-4 Section 2.
- (b) Please explain the necessity of each quality control procedure you describe in (a) above.
- (c) If there were any quality control procedures applied in the OCA LR L-4 Section 3 SAS programs, please list and describe each and explain the necessity for it.
- (d) Please quantify the number of route carrier-day observations eliminated through each of your quality control procedures.
- (e) Please quantify the number of route carrier-day observations retained as a result of "corrections" performed with your quality control procedures and explain each type of "correction."
- (f) With sufficient time for analysis please identify the types of quality control procedures and tests you believe would be appropriate to perform on the DOIS data in USPS LR L-160.

RESPONSE TO MPA/ANM/OCA-T3-10

- (a) Quality control procedures are in the program, consisting of setting certain data equal to zero
- (b) Where data are missing they are either zero or non zero and not recorded. I assumed that the data were zero. In the case of zero delivery time, the observation was deleted
- (c) Quality control for the database occurred prior to running the programs
Accordingly, for the Section 3 program quality control procedure the procedures were in Section 2
- (d) There were 155,624 eliminated through the elimination of observations with zero delivery time. There were an additional 91,488 observations eliminated due to failure of ZIP codes to match
- (e) There were 176,390 observations retained.

**RESPONSE OF OCA WITNESS J. EDWARD SMITH
TO INTERROGATORIES MPA/ANM/OCA-T3-1-25**

- (f) Quality control procedures could include tests for outliers as well as including a detailed examination of each observation for completeness.

RESPONSE OF OCA WITNESS J. EDWARD SMITH
TO INTERROGATORIES MPA/ANM/OCA-T3-1-25

MPA/ANM/OCA-T3-15. In response to OCAJUSPS-T14-8 in this case, the USPS provided the data in USPS LR L-160. In that response, the USPS provided MSP Scan data for only a few time periods.

- (a) Please explain what the MSP Scan data represent.
- (b) Please explain how the MSP Scan data were collected.
- (c) Please explain why you requested the data.
- (d) Please state whether you used the MSP Scan data in some way and, if so, how you used the data.
- (e) If you used the data in any way, please produce all documents reflecting that use.

RESPONSE TO MPA/ANM/OCA-T3-15

- (a) MSP data provide the times that the carrier scanned Hot Case, Start of route, End of Route, and Return
- (b) The data are scanned by the carrier.
- (c) OCA wished to have the option of performing an analysis with travel time excluded.
- (d) The data have not yet been used.
- (e) See (d).

RESPONSE OF OCA WITNESS J. EDWARD SMITH
TO INTERROGATORIES MPA/ANM/OCA-T3-1-25

MPA/ANM/OCA-T3-16. On page 16, lines **7-10**, of your testimony, you state: "**The** database has only been available for a short time, and significantly more time would be required for **a** thorough analysis. Due to the limited amount of time, I have been able **to** apply minimal quality control procedures and have not yet made full use of all of the data."

- (a) Please provide your assessment of the extent to which the DOIS model results you include in your testimony could change as additional, appropriate quality control procedures are applied to the **DOIS** data.
- (b) Please explain whether you believe that you would continue to recommend the **ND6 DOIS** model once **you** had conducted all the additional, appropriate quality control procedures you believe are appropriate.
- (c) Under what circumstances would additional, appropriate quality control procedures applied to the data affect the specification of an econometric model? Please explain.

RESPONSE TO MPA/ANM/OCA-T3-16

- (a) Generally speaking, point estimates should not change significantly. However, the standard errors may be lower
- (b) Assuming that the results were unchanged in the various models, such would be the case
- (c) Additional quality control procedures would not affect the specification of the model, for the specification of the model involves the selection of variables and the specification of relationships

REVISED RESPONSE OF OCA WITNESS J. EDWARD SMITH TO INTERROGATORY
OF UNITED STATES POSTAL SERVICE (USPS/OCA-T3-1)

Variability	Cost Pool Name	cost Pool Dollar Amount	Source
Letters			
Flats			
Sequenced			
Parcels.			

REVISED RESPONSE OF OCA WITNESS J. EDWARD SMITH TO INTERROGATORY
OF UNITED STATES **POSTAL** SERVICE (USPS/OCA-T3-1)

RESPONSE TO USPS/OCA-T3-1

(a) – (d) Confirmed.

(e) All variabilities should be applied to the same cost pool. That cost pool is **regular delivery** street time minus **accountable** time.

(9) There is no credible variability for collection time. The data used by witness Bradley do not distinguish the time to collect volumes of large parcels or flats from at-home offices or businesses from the time to collect volumes of letters and small packages from customer receptacles. Nor do the volume data provide the number of pieces by shape by delivery point.

(g) I have not computed a variability. **However, the extra time for accountables is an incremental cost—i.e., it would not occur if there were no accountables. Accordingly, this cost is 100 percent attributable under the Commission's approach to attribution.**

RESPONSE OF OCA WITNESS J. EDWARD SMITH TO INTERROGATORIES
OF UNITED STATES POSTAL SERVICE (USPS/OCA-T3-1-6)

USPS/OCA-T3-2. In your opinion, is an Euler equation an equilibrium condition? Please provide a mathematical basis for your opinion.

RESPONSE TO USPS/OCA-T3-2

A discussion of Euler's Theorem on page 373, with relevant material on subsequent pages, is presented in Alpha C. Chiang, *Fundamental Methods of Mathematical Economics* (1967). As presented, the Euler equation is an equilibrium condition, based on the assumption of homogeneity of degree 1 in the production function and the attainment of perfect competition

Additional discussions can be found in a variety of sources, including the following:

- Andreu Mas-Colell, Michael D. Whinston, Jerry R. Green, *Microeconomic Theory* (1995).
- C.E. Ferguson, *Microeconomic Theory* (1969).
- Ira Horowitz, *Decision Making and the Theory of the Firm* (1970).
- Akira Takayama, *Analytical Methods in Economics* (1993).

The equation in the context of the production process is used to show that under conditions of perfect competition and constant returns to scale, total income equals total output, referenced as the "adding -up theorem."

RESPONSE OF OCA WITNESS J. EDWARD SMITH TO INTERROGATORIES
OF UNITED STATES POSTAL SERVICE (USPS/OCA-T3-1-6)

USPS/OCA-T3-3. Please refer to page 5 of your testimony, lines 27 to 29.

- (a) Please define the term "Postal Service management" as you use the term.
- (b) Please describe your understanding of or assumptions about the level of management at which your hypothesized optimization takes place. For example, do you envision the decision being made by delivery unit supervisors, postmasters, or area vice presidents?
- (c) Please describe your understanding about the timing of your hypothesized optimization process. For example, how often does it take place?

RESPONSE TO USPS/OCA-T3-3

[I changed the listing of subparts in the original question from "(h), (i), (j)" to "(a), (b), (c)"]

- (a) "Postal Service management" is defined as the people with operating and capital authority who make the tradeoffs and choices among inputs, as defined on page 6, line 1.
- (b) I have assumed the implementation of efficient resource and optimization methods. These would be the people whose combined operating and capital authority would be sufficient to make the tradeoffs.
- (c) From the viewpoint of economic analysis, one would assume that the hypothesized optimization would occur as needed.

RESPONSE OF OCA WITNESS J. EDWARD SMITH TO INTERROGATORY
OF UNITED STATES POSTAL SERVICE (USPS/OCA-T3-4)
Revised October 25, 2006

USPS/OCA-T3-4. Please refer [to] page 57 of the file entitled, "LibrefPrograms2.doc" in Library Reference OCA-LR-T3-1.

- (a) Please confirm that the program entitled CC2 reads in a data set entitled, "newdois.dense1." If you **do** not confirm, please explain the SAS code on page 57 that apparently reads in this dataset.
- (b) Please confirm that the variable "units" used on page 58 is from the data set "newdois.dense1." If you do not confirm, please identify the data set from which "units" is drawn.
- (c) Please provide your understanding of what the variable "units" represents and how it is measured.
- (d) Please confirm that the variable "units" is not determined by the Postal Service. If you do not confirm, please explain, in detail, how the Postal Service determined the variable "units."
- (e) Please confirm that the formula for the density variable used in this program is "units/sqm." If you do not confirm, please provide the formula for the density variable used in this program.

RESPONSE TO USPS/OCA-T3-4

- (a) Not confirmed because the relevant document is "LibrefPrograms.doc," not "LibrefPrograms2.doc". Otherwise the interrogatory is confirmed.
- (b) Not confirmed because the relevant document is "LibrefPrograms.doc," not "LibrefPrograms2.doc". Otherwise the interrogatory is confirmed.
- (c) According to page 5 of USPS-LR-K-81, units are "housing units."
- (d) I assumed that such was the case.
- (e) Confirmed,

RESPONSE OF OCA WITNESS J. EDWARD SMITH TO INTERROGATORIES
OF UNITED STATES POSTAL SERVICE (USPS/OCA-T3-1-6)

USPS/OCA-T3-5. Please refer to page 14 of your testimony where you state, "the marginal costs do not comport with a *priorias* sumptions of reasonableness." Please provide your a priori assumptions of reasonableness, along with detailed operational justifications for those assumptions.

RESPONSE TO USPS/OCA-T3-5

The referenced quote is from lines 2 and 3 on page 14. My *a priori* assumptions are that on a marginal cost basis, flats should cost more than letters, DPS mail should cost relatively less to deliver than other types of letter and flats mail, and sequenced mail should not be near zero in delivery cost. These assumptions are based on the observation of mail prepared for delivery.

RESPONSE OF OCA WITNESS J. EDWARD SMITH TO INTERROGATORIES
OF UNITED STATES POSTAL SERVICE (USPS/OCA-T3-1-6)

USPS/OCA-T3-6. Please refer to the regressions entitled CC8 through CC12 on page 11 of your testimony.

(a) Please confirm that the dependent variable in these regressions ~~is~~ the sum of regular delivery time and **parcel/accountable** delivery time for each ZIP Code day. If you do not confirm, please provide the definition of the dependent variable in these regressions.

(b) Please confirm that the values for the dependent variable in these regressions should never be smaller than the corresponding values for the dependent variable in a regression on the same ZIP Codes using just regular delivery time as the dependent variable. If you do not confirm, please explain how the time for the sum of regular delivery time and **parcel/accountable** delivery time could be less than the time for just regular delivery time.

RESPONSE TO USPS/OCA-T3-6

(a) - (b) Confirmed

RESPONSES OF OCA WITNESS J. EDWARD SMITH
TO INTERROGATORIES USPS/OCA-T3-7-12

USPS/OCA-T3-7

The program entitled "ReadVolume.sas" in Section 2 of Library Reference OCA-LR-T3-1 Contains the following code:

```
*****Housing units, commercial units, and land were obtained by Zip code;
****The land area by zip code is exclusive of any water area;
*****The resulting database is "ahactzips";
*****The first two letters are the initials of the individual assembling the
data, and "actzip" denotes that an actual rather than an enclosed zip is being
used;
```

- (a) Please explain, in detail, how and where the data on "housing units," "commercial units," and "land" were obtained by ZIP Code.
- (b) Please provide all source data sets and all programs (including logs and listings) that were used in "obtaining" the data. Please also provide a flow chart which explains how the data set was constructed.
- (c) Please confirm that the database "ahactzips" listed above is presented in Excel format as Ahactzips.xls in OCA-LR-T3-1.

RESPONSE TO USPS/OCA-T3-7

(a) Source of data

<http://www.census.gov/geo/www/gazetteer/places2k.html>

<http://www.census.gov/tiger/trns/gazetteer/zcta5.txt>

<http://censtats.census.gov/cbpnaic/cbpnaic.shtml>

Household data from dc_dec_2000_sf1_u_data1.txt

Unit Definition

http://www.census.gov/popest/topics/terms/housing_unit.html

- (b) The information was transferred through cut-and-paste into an Excel file.

There are not programs, logs, or listings.

RESPONSES OF OCA WITNESS J. EDWARD SMITH
TO INTERROGATORIESUSPS/OCA-T3-7-12

(c) Not confirmed. The file with protected information was inadvertently provided in OCA-LR-L-4 but was removed. Please see "Office of the Consumer Advocate Notice of Replacement of Library Reference OCA-L-4," September 27, 2006

RESPONSES OF OCA WITNESS J. EDWARD SMITH
TO INTERROGATORIES USPS/OCA-T3-7-12

USPS/OCA-T3-8

The program entitled "ReadVolume.sas" in Section 2 of Library Reference OCA-LR-T3-1 Contains the following code:

```
*****The procedure below assumes that missing data is zero rather than
deleting the data--this is an important assumption;
```

```
data volume;
set volume;
if autoflats = "." then autoflats = 0;
if autoltrs = "." then autoltrs = 0;
if casflts = "." then casflts = 0;
if casltrs = "." then casltrs = 0;
if dps = "." then dps = 0;
if miles = " " then miles = 0;
if prcl = " " then prcl = 0;
if pri = "." then pri = 0;
if seqflts = " " then seqflts = 0;
if seqltrs = " " then seqltrs = 0;
if seq_letters_sets = "." then seq_letters_sets = 0;
if seq_flats_pcs = "." then seq_flats_pcs = 0;
run;
```

- (a) For each of the variables listed in the code above, please provide a frequency table, by Zip Code, indicating how often a zero value reflects a missing observation and how often a zero value reflects and [sic] actually recorded value of zero.
- (b) Please explain why this assumption is "important."
- (c) Please explain why you chose to make this assumption.

RESPONSE TO USPS/OCA-T3-8

- (a) Please see Interrogatory 8 Listing in Library Reference OCA-LR-L-8.
- (b) There appeared to be a large number of missing entries. Several discussions with operational personnel at Postal facilities indicated that the personnel were conscientious and dedicated in meeting data requirements. On the assumption

RESPONSES OF OCA WITNESS J. EDWARD SMITH
TO INTERROGATORIES USPS/OCA-T3-7-12

that such behavior extended across the Postal Service I concluded that absent entries were probably zero rather than failure of an individual to enter positive data.

(c) The assumption results in the inclusion of the observation in the analysis rather than its deletion from the analysis. If the assumption had not been made, then the dataset ultimately analyzed would have been different.

RESPONSES OF OCA WITNESS J. EDWARD SMITH
TO INTERROGATORIESUSPS/OCA-T3-7-12

USPSIOCA-T3-9

Please consider the program entitled, "ReadVolume.sas" in Section 2 of Library Reference OCA-LR-Tbl. Please provide, in accordance with the Commission rules, the following documentation for that program:

(a) A general description of the program that includes:

1. Objectives of the program
2. Processing tasks performed.
3. Methods and procedures employed.
4. A listing of the input and output data
5. A listing of the source codes.

(b) For all input data:

1. Designation of all sources of such data.
2. Explanations of any modifications to such data made for use in the program.

(c) Definitions of all input and output variables or sets of variables.

(d) A description of input and output data file organization.

RESPONSE TO USPSIOCA-T3-9

(a)– (d) Please see "Documentation for ReadVolume.sas" in Library Reference OCA-LR-L-8

RESPONSES OF OCA WITNESS J. EDWARD SMITH
TO INTERROGATORIES USPS/OCA-T3-7-12

USPS/OCA-T3-10

Please consider the program entitled, "**ReadVolume.sas**" in Section **2** of Library Reference OCA-LR-T3-1. Please provide the Sas **log** for that program.

RESPONSE TO USPS/OCA-T3-10

Please see "SASLOG for ReadVolume.sas" in Library Reference OCA-LR-L-8.

RESPONSES OF OCA WITNESS J. EDWARD SMITH
TO INTERROGATORIES USPS/OCA-T3-7-12

USPS/OCA-T3-11

Please refer to the file entitled, "LibrefPrgrmsSection3.doc" contained in Library Reference OCA-LR-Tbl.

- (a) Please confirm that, as indicated on page 13 of that document, the dataset used to estimate the full quadratic contains 160 observations with missing values. If you do not confirm, please indicate how many observations there are with missing values?
- (b) Given that you have assumed that "missing data is (sic) zero rather than deleted," please explain why the estimation data set contains 160 observations with missing values.

RESPONSE TO USPS/OCA-T3-11

- (a) Confirmed
- (b) The 160 missing observations are generated from the unavailability of square miles of land for one of the ZIP codes. In the case of square miles of land, I did not assume that the appropriate entry was zero.

RESPONSES OF OCA WITNESS J. EDWARD SMITH
TO INTERROGATORIES USPS/OCA-T3-7-12

USPSIOCA-T3-12

Do you consider "density" to be an endogenous or exogenous variable in the Postal Service optimization process that you assert on page 6 of your testimony. **Please** explain fully.

RESPONSE TO USPSIOCA-T3-12

The equations model cost as a function of output. This type of cost curve does not use the variable density. Accordingly, for purposes of this analysis, the question is meaningless.

RESPONSE OF OCA WITNESS SMITH
TO INTERROGATORIESUSPS/OCA-T3-13-23

USPS/OCA-T3-13. This interrogatory deals with the possible presence of Sundays and national holidays in the analysis database derived from DOIS data that you used to estimate an econometric equation for street time.

- (a) Please confirm that the Postal Service does not routinely provide delivery of non-Express Mail on letters, flats and parcels on Sundays. If you do not confirm, please provide documentation or evidence supporting your contention that the Postal Service provides regular Sunday delivery.
- (b) Please confirm that November 24, 2002 fell on a Sunday. If you do not confirm please indicate what day of the week occurred on November 24, 2002.
- (c) Please confirm that data from November 24, 2002 are included in your econometric equations that use DOIS data in the program entitled "ND1.SAS." If you do not confirm please provide the computer code that eliminates the data for November 24, 2002 from the analysis data set.
- (d) Please confirm that the Postal Service does not provide delivery of non-Express Mail letters, flats and parcels on federal holidays. If you do not confirm, please provide documentation or evidence supporting your contention that the Postal Service provides regular delivery on national holidays.
- (e) Please confirm that in 2002, Washington's Birthday, also known as President's Day, a national holiday, fell on February 18. If you do not confirm, please provide the date for that holiday in 2002.
- (f) Please confirm that data from February 18, 2002 are included in your econometric equations that use DOIS data in the program entitled "ND1.SAS." If you do not confirm please provide the computer code that eliminates the data for February 18, 2002 from the analysis data set.

RESPONSE TO USPS/OCA-T3-13.

- (a) Confirmed
- (b) Confirmed
- (c) Confirmed
- (d) Confirmed.
- (e) confirmed.
- (f) Confirmed.

RESPONSE OF OCA WITNESS SMITH
TO INTERROGATORIES USPS/OCA-T3-13-23

USPS/OCA-T3-14. This interrogatory relates to your preferred estimation method.

- (a) Please confirm that you did not estimate any "fixed effects" models of delivery time.
- (b) If you do not confirm, please provide the results of any "fixed effects" regressions.
- (c) If you do confirm, please explain why you did not estimate any "fixed effects" regressions and chose instead to estimate only "pooled" econometric models.

RESPONSE TO USPS/OCA-T3-14

- (a) Confirmed.
- (b) Not Applicable
- (c) Problems associated with the estimation of fixed effects models were documented in Docket No. R2005-1. Limited time availability precluded investigating such problems as related to the current database and performing subsequent analysis if appropriate.

RESPONSE OF OCA WITNESS SMITH
TO INTERROGATORIES USPS/OCA-T3-13-23

USPS/OCA-T3-15. Please refer to Table 1 on pages 10 and 11 of your testimony

- (a) Please confirm that all of your econometric models are estimated using data sets that have "ZIP Code -- Days" as the individual observation. If you do not confirm, please indicate which of these regression models are not estimated on ZIP CODE days, and please provide the unit of observation on which they are estimated.
- (b) Please confirm that you did not estimate any econometric models using "route -- day" observations.
- (c) If you do not confirm part b., please provide the results from estimation of econometric models at the "route-day" level.
- (d) If you do confirm part b., please explain why you did not estimate any econometric models using "route-day" observations.
- (e) Please confirm that estimation of econometric models using ZIP Code-Day data implies that the optimization process you envision on pages 5 and 6 of your testimony is taking place at the ZIP Code. If you do not confirm, please provide a mathematical basis for justifying a simultaneous optimization at a different level of the delivery process and an econometric estimation at the "ZIP-Day" level.

RESPONSE TO USPS/OCA-T3-15

(a) Confirmed

(b) Confirmed

(c) Not applicable

(d) Problems associated with the estimation of route-day models were documented in Docket No. R2005-1. Accordingly, before undertaking such estimation it would be necessary to decide whether such an approach would be appropriate. Given the limited time available for analysis, this was not work that could have been accomplished even if found to be appropriate.

(e) The estimation of econometric models using ZIP Code-Day data is consistent with optimization taking place at the ZIP Code level. Whether a better or different model could be developed and how such a model would be estimated has not been determined.

RESPONSE OF OCA WITNESS SMITH
TO INTERROGATORIES USPS/OCA-T3-13-23

USPS/OCA-T3-16. Let $g(\theta, y)$ be a differentiable function that is concave, increasing and homogenous of degree one in θ , and non-decreasing in y . Let $g(\theta, y) \geq 0$ for all $\theta \geq 0$ and $g(\bar{\theta}, y) \geq 0$ for some $\bar{\theta} \geq 0$ and all $y \geq 0$.

- (a) Do you agree that there exists a monotonic, input regular, and convex family of input requirement sets $V^*(y)$ such that $g(\theta, y) = \min_x w \cdot x$ s.t. $x \in V^*(y)$?
- (b) If you do not agree, please provide the mathematical basis for your disagreement.

RESPONSE TO USPS/OCA-T3-16

- (a) I agree.
- (b) Not applicable.

RESPONSE OF OCA WITNESS SMITH
TO INTERROGATORIES USPS/OCA-T3-13-23

USPS/OCA-T3-17. Please refer to your discussion of isoquants and isocost lines on page 5 of your testimony

- (a) Please confirm that both isoquants and isocost lines are graphical representations of underlying mathematical conditions. If you do not confirm, please explain how the isoquants and isocost lines can be constructed without underlying mathematical conditions.
- (b) Please confirm that the associated underlying mathematical conditions associated with cost minimization are known at the first-order necessary conditions. If you do not confirm, please explain fully.
- (c) Please confirm that these first order conditions can be solved for the conditional factor demand equations. If you do not confirm, please explain fully.
- (d) Please confirm that the cost minimization process you describe on pages 5 and 6 of your testimony is an example of constrained optimization. If you do not confirm, please explain why a firm producing output faces no constraints.

RESPONSE TO USPS/OCA-T3-17

- (a) Confirmed
- (b)** Confirmed.
- (c) Confirmed
- (d) Confirmed

RESPONSE OF OCA WITNESS SMITH
TO INTERROGATORIES USPS/OCA-T3-13-23

USPS/OCA-T3-18. Please refer to page 6 of your testimony where you state, inter alia, that types of mail and delivery points are “clearly” outputs. Please provide a clear, unambiguous decision rule for determining when a variable is an output of the Postal Service.

RESPONSE TO USPS/OCA-T3-18

Although I do not have an unambiguous decision rule at this time, I will stand by the statement.

RESPONSE OF OCA WITNESS SMITH
TO INTERROGATORIESUSPS/OCA-T3-13-23

USPS/OCA-T3-19. Please refer to page 22 of your testimony in which you state: "I have not made an adjustment for autocorrelation: a variety of possible adjustments were attempted and yielded unsatisfactory results.

- (a) Please provide a complete and detailed list of all attempted adjustments for autocorrelation.
- (b) Please provide all computer programs, computer logs, and outputs for these attempts.
- (c) Please explain why or why not these results should be considered part of your "choice trail," as that term is defined in the Commission's rules, and reported accordingly.
- (d) Please provide the basis for the determination that the results were "unsatisfactory."
- (e) Please provide the criteria for establishing when autocorrelation adjustments are satisfactory. Please provide citations to the econometrics literature where these criteria have been used

RESPONSE TO USPS/OCA-T3-19

(a) Other than a simple PROC AUTOREG command in SAS I made no list of attempted adjustments.

(b) They were not retained, given that they were of minimal consequence, and given that witness Bradley had not referenced the subject.

(c) The results were referenced, but their value was de minimis, and the issue was not examined. They should be considered as possible issues for future consideration. I have not indicated that autocorrelation will or will not ultimately prove to be an issue. I have indicated that I have not considered it in any meaningful sense. The same can be said for witness Bradley's presentation.

(d) There did not seem to be any meaningful output.

(e) One would find an adjustment satisfactory if appropriately made and providing meaningful results. When one obtains meaningless results, it is appropriate to conclude that either the technique and variables considered are not appropriate, or, alternatively, that one is not conducting the analysis correctly.

RESPONSE OF OCA WITNESS SMITH
TO INTERROGATORIESUSPS/OCA-T3-13-23

USPS/OCA-T3-20. Please refer to the DOIS data set that you use to estimate econometric equations presented in your testimony.

- (a) Please confirm that the DOIS data set that you used in you econometric analysis was produced by the Postal Service in response to a request from the Office of Consumer Advocate. If you do not confirm, please indicate who, other than the Office of Consumer Advocate, requested these data.
- (b) Please confirm that the structure of the data set, described by you on page 22 of your testimony as "16 discontinuous sets of observations over a period of four years," was specified by the Office of Consumer Advocate. If you do not confirm, please indicate who, other than the Office of Consumer Advocate, requested the data set be constructed in this way?
- (c) Please confirm that you individually formulated the requested structure.
- (d) If you confirm part c, please explain why you requested "16 discontinuous sets of observations over a period of four years."
- (e) If you do not confirm part c, please indicate who formulated the structure of the DOIS data set requested by the Office of Consumer Advocate.
- (f) If you do not confirm part c., please indicate if you participated in the formulation of the structure of the DOIS data set requested by the Office of Consumer Advocate.
- (g) In the case that no individual formulated the structure of the DOIS data set requested by the Office of Consumer Advocate, please explain how the request was formulated, please indicate all of those who participated in its formulation, please provide all documents that relate to its formulation, please explain when the formulation was first made, and please explain the motivation behind requesting a data set of this structure.

RESPONSE TO USPS/OCA-T3-20

- (a) Confirmed,
- (b) Confirmed.
- (c) Not confirmed
- (d) Not applicable.
- (e) Members of the Office of the Consumer Advocate.

RESPONSE OF OCA WITNESS SMITH
TO INTERROGATORIES USPS/OCA-T3-13-23

(f) I participated.

(g) This was a group consideration. The motivation behind requesting a data set of this structure was to obtain a data set without imposing an inordinate drain on the resources of the Postal Service. Obviously economists and analysts prefer to request as much data as can be conceivably obtained. It was decided to request what appeared to be an adequate amount of data. Whether the amount obtained was adequate has not been determined.

RESPONSE OF OCA WITNESS SMITH
TO INTERROGATORIES USPS/OCA-T3-13-23

USPS/OCA-T3-21. When did you first start working on estimation of city carrier street time equations for the Office of Consumer Advocate?

RESPONSE TO USPS/OCA-T3-21

I began a review of the theoretical and estimation procedures associated with the estimation of city carrier street time equations shortly after witness Bradley's testimony was filed in Docket No. R2005-1. Prior to that time I had also reviewed and developed a modest familiarity with the Postal Service's previous estimation efforts.

RESPONSE OF OCA WITNESS **SMITH**
TO INTERROGATORIESUSPS/OCA-T3-13-23

USPS/OCA-T3-22. Did anyone else at the Office of Consumer Advocate, or on behalf of the Office of the Consumer Advocate, start working on city carrier street time equations before you did? If so, please indicate who they were, when they worked on those equations, and whether you relied upon their work in formulating your approach.

RESPONSE TO USPS/OCA-T3-22

No.

RESPONSE OF OCA WITNESS SMITH
TO INTERROGATORIESUSPS/OCA-T3-13-23

USPS/OCA-T3-23. Please refer to pages 22 and 23 of your testimony, in which you refer to the need for future work in the area of city carrier street time costs. What plans does the Office of Consumer Advocate have for future work in this area?

RESPONSE TO USPS/OCA-T3-23

We expect to continue to review the insight and information developed in the current case, to review emerging concepts in the Postal literature, to consider whether and how possible theoretical alternatives to the modeling of Postal delivery are appropriate, to continue our consideration of alternatives in estimation procedures, and to conduct such data analysis as may be appropriate.

RESPONSES OF OCA WITNESS J. EDWARD SMITH
TO INTERROGATORIES USPS/OCA-T3-24-26

USPS/OCA-T3-24. Please refer to USPS/OCA-T3-1, part e. That part of the question asks you to provide not only the cost pool name, but also the cost pool dollar amount and the source of the **cost** pool information. In your response, you provided only two cost pool names. For the two cost pools you name, please provide the **cost** pool dollar amounts and the source of the cost pool information.

RESPONSE TO USPS/OCA-T3-24

The ND6 variabilities apply to at least 95 percent of regular delivery time. The data are labeled street hours. Accordingly, cost data encompassing street hours on regular routes, reduced by time for accountables, would be the appropriate cost pool. **USPS-**LR-L-1, page 7-3, contains a list of regular delivery cost components. The total cost of regular delivery needs to be reduced by the accountables portion of the **5.1** percent for parcels/accountables before application of my ND6 variabilities. I have not had time to locate this portion

RESPONSES OF OCA WITNESS J. EDWARD SMITH
TO INTERROGATORIESUSPS/OCA-T3-24-26

USPS/OCA-T3-25. Please refer to USPS/OCA-T3-1, part g. That question acknowledges that you do not estimate a variability for accountables and, in light of that fact, asks **you to** provide the variability that the Commission should use in finding volume variable street time accountables cost. Your response states that you have not computed a **variability**, but fails to provide the variability that you think the Commission should use. Please provide that variability.

RESPONSE TO USPS/OCA-T3-25

The extra time for accountables **is** an incremental cost—i.e., it would not occur if there were no accountables. Accordingly, this cost is **100** percent attributable under the Commission's approach to attribution.

RESPONSES OF OCA WITNESS J. EDWARD SMITH
TO INTERROGATORIES USPS/OCA-T3-24-26

USPSIOCA-T3-26. Please refer to USPSIOCA-T3-12, which you claim in your response is a "meaningless" question.

- (a) Please confirm that the question asked for your opinion as to whether "density" is an endogenous or exogenous variable in the Postal Service optimization process. If you do not confirm, please explain your interpretation of the phrase, "Do you consider 'density' to be an endogenous or exogenous variable in the Postal Service optimization process."
- (b) Please confirm that the question does not use the terms "equations" or "model," but that both of those terms appear in your response.
- (c) Please confirm that on page 6 of your testimony you state:

An economist would refer to this effort as the attainment of equilibrium between isocosts and isoquants. The management probably thinks of the effort as making good decisions on how to get the job done as **efficiently as possible**—i.e., whether to work overtime, whether to pivot routes, whether to design routes in various configurations, etc. As a result of the consideration of tradeoffs, the cost to deliver a quantity of mail is determined. Density is an output of the process, not an input to the process. Density is determined partly by how the route is designed and partly by the characteristics of the service territory. [Emphasis added].

- (d) Please confirm that on page 6 of your testimony you also state:

However, ZIP code density—i.e., dp/sqm —is a function of the arrangement of the City Carrier delivery routes, which would be achieved through the determination of a least cost solution to a production function through the attainment of equalities between various marginal rates of technical substitution and input/price ratios in a cost minimization process. The value of the density variable is an output of the cost minimization process; density is not an input to the cost function. [Emphasis added.]

- (e) Given that you twice describe density as an output of the Postal Service cost minimization process, please answer the original question posed in USPS/OCA-T3-12 as to whether you consider density to be an endogenous or exogenous variable with respect to the Postal Service's optimization (or cost minimization) process.

RESPONSES OF OCA WITNESS J. EDWARD SMITH
TO INTERROGATORIES USPS/OCA-T3-24-26

RESPONSES TO USPS/OCA-T3-26

- (a) To the degree that density results from the optimization process, it would be an endogenous variable. For example, the rearrangement of ZIP codes could result in such a situation. The rearrangement of routes as part of an optimization process would make density an endogenous variable in measuring density on a route, but this density would be different from the density for a ZIP code. However, it should be noted that witness Bradley did not consider density as related to routes but, rather, as related to ZIP codes.
- (b) Confirmed.
- (c) Confirmed, given that one of the characteristics of the service territory is the land area.
- (d) Confirmed, given that one of the characteristics of the service territory is the land area.
- (e) Density is endogenous at the ZIP code level given that ZIP codes can be varied. At the route level, the density for a route would also be endogenous if routes were optimized as part of the planning process for efficient mail delivery.

1 CHAIRMAN OMAS: That now brings us to oral
2 cross-examination.

3 MR. MCLAUGHLIN: Mr. Chairman?

4 CHAIRMAN OMAS: Excuse me.

5 MR. MCLAUGHLIN: Tom McLaughlin for Advo,
6 Inc.

7 CHAIRMAN OMAS: I'm sorry. I didn't see you
8 there, Mr. McLaughlin.

9 MR. MCLAUGHLIN: I have some additional
10 designations.

11 I have a confession to make first. When I
12 wrote down Mr. Smith's designation date I wrote down
13 the wrong Mr. Smith's testimony; the correct Mr.
14 Smith, but the other piece of testimony, so I do have
15 some additional designations that I'd like to submit
16 for the record

17 Let me hand the witness two copies of the
18 sets of designations.

19 CHAIRMAN OMAS: Without objection.

20 MR. MCLAUGHLIN: Mr. Chairman, the packet
21 that I've handed the witness includes his responses to
22 Advo/OCA-T3-1, 3 through 6, 8, 10 through 12, 14, 16
23 through 18, 24 and 26 through 56.

24 I advised counsel of this yesterday, and the
25 witness has seen these earlier this morning.

1 Mr. Smith, have you had a chance to look
2 those over?

3 THE WITNESS: Yes, I have.

4 MR. MCLAUGHLIN: If these interrogatory
5 questions were asked of you today would your answers
6 be the same?

7 THE WITNESS: Yes, they would.

8 MR. MCLAUGHLIN: Mr. Chairman, at this point
9 I would request that those identified interrogatories
10 be received and transcribed into the record.

11 CHAIRMAN OMAS: Without objection. So
12 ordered.

13 (The documents referred to
14 were marked for
15 identification as Exhibit
16 Nos. Advo/OCA-T3-1, 3 through
17 6, 8, 10 through 12, 14, 16
18 through 18, 24 and 26 through
19 56, and were received in
20 evidence.)

21 //

22 //

23 //

24 //

25 //

RESPONSE OF OCA WITNESS J. EDWARD SMITH TO
INTERROGATORIES OF ADVO (ADVO/OCA-T3-1-5)

ADVO/OCA-T3-1. On page 3 (lines 2 through 10) of your testimony, you criticize the CCSTS data. Please provide the following (including any related machine-readable programs, data sets and results):

- (a) Description and results of all statistical or logical tests you performed on the CCSTS data themselves.
- (b) Description and results of all variations of data cleaning, elimination, corrections, adjustments, etc. you performed on the CCSTS data themselves.

RESPONSE TO ADVO/OCA-T3-1

- (a) The Commission provided a comprehensive analysis of the database, including statistical analyses, in Docket No. R2005-1. I conducted no additional tests

RESPONSE OF OCA WITNESS J. EDWARD SMITH TO
INTERROGATORIES OF ADVO (ADVO/OCA-T3-1-5)

My greatest concern with the use of the CCSTS data involves the Variance Inflation

Variable	Unrestricted Quadratic VIF	Restricted Quadratic VIF
let	43	21
let2	95	13
cf	28	16
cf2	33	12
seq		4
seq2	5	4
cv	24	4
cv2	7	4
spr	25	8
spr2	26	6
dp	27	17
dp2	74	12
dens	16	7
dens2	10	7
lf	98	
lse	22	
lcv	36	
lspr	97	
ldp	166	
fse	9	
fcv	14	
fspr	44	
fdp	67	
scv	8	
sspr	12	
sdp	19	
cspr	10	
cdp	31	
spdp	92	
ldns	20	
fdns	..	
sdns	3	
cdns	8	
spdns	10	
dpdns	20	

Factors (VIFs).

The VIF values are summarized in the above table, According to Der and Everitt,¹

The variance inflation factor of an explanatory variable indicates the strength of the linear relationship between the variable and the remaining explanatory

¹ Geoff Der and Brian S. Everitt, *A Handbook of Statistical Analyses Using SAS*, 2d ed. (2002).

RESPONSE OF OCA WITNESS J. EDWARD SMITH TO
INTERROGATORIES OF ADVO (ADVO/OCA-T3-1-5)

variables. A rough rule of thumb is that variance inflation factors greater than 10 give some cause for concern.

(b) I have not modified witness Bradley's database other than for redefinitions, such as defining letters to include only DPS mail, as explicitly stated in the accompanying SAS programs.

RESPONSE OF OCA WITNESS J. EDWARD SMITH TO
INTERROGATORIES OF ADVO (ADVO/OCA-T3-1-5)

ADVO/OCA-T3-3. Please provide all CCSTS econometric models and results you ran other than the ones presented in your testimony and OCA-LR-L-4. Please include any related machine-readable programs, data sets and results.

RESPONSE TO ADVO/OCA-T3-3

All models and results developed from the models have been presented with the exception of one minor model modification involving the use of a dummy variable, used at times for small packages. The file "Dummy" in OCA-LR-6 contains one example of the use of a dummy. As can be seen, the use of a dummy variable did not have an effect on the sign of volume variability. In no case did the use of a dummy variable in one of the models considered solve the problem of negative variabilities, and the possible use of dummies was not pursued.

RESPONSE OF OCA WITNESS J. **EDWARD** SMITH TO
INTERROGATORIES OF ADVO (ADVO/OCA-T3-1-5)

ADVO/OCA-T3-4. For the DOIS data and model results, please provide:

- (a) Description and results of all statistical and logical tests you performed on the DOIS data themselves.
- (b) Description and results of all variations of data cleaning, elimination, corrections, adjustments, etc. you performed on the DOIS data themselves.

RESPONSE TO ADVO/OCA-T3-4

(a) A number of data points were eliminated to remove duplication and cases with delivery time equal to zero. In addition, in the case of missing data, other than delivery time, I set missing values equal to zero rather than eliminating the observations. Although I performed a test for outliers, I have not retained the test. I did not have a basis for determining whether an outlier should actually be eliminated. Therefore, no datum was eliminated on the ground of being an outlier. This approach appears to be consistent with witness Bradley's approach.

- (b) See (a)

RESPONSE OF OCA WITNESS J. EDWARD SMITH TO
INTERROGATORIES OF ADVO (ADVO/OCA-T3-1-5)

ADVO/OCA-T3-5. Please provide descriptions, tests and results of all econometric analyses performed with DOIS data sets other than the data sets used in the development of the 12 models you present in Table 4 of your testimony and in OCA-LR-L-4, including any machine-readable programs, analytical results, and new data sets that you used.

RESPONSE TO ADVO/OCA-T3-5

USPS-LR-K-152 provides DOIS data on a weekly basis for selected ZIP codes and selected weeks over the 2002 through 2005 timeframe. OCA-LR-L-6 contains all of the models and results.

RESPONSE OF OCA WITNESS J. EDWARD SMITH
TO INTERROGATORIESADVO/OCA-T3-6-24

ADVO/OCA-T3-6. On page 3 (lines 14 to 17), you state that: "Clearly delivery points should also be included [in the City Carrier cost model], for carriers need to pass each delivery point in order to complete the route: one of the outputs of the delivery process is the passage by a carrier past a delivery point whether or not any mail is delivered." On page 8 (lines 9-11), you state: "Density should measure the degree of proximity of delivery points, possibly providing information on congestion or carrier route miles to be driven."

- (a) With respect to a city carrier passing by a delivery point, if different zip codes have different average distances among delivery points (*ceterus* [sic] *paribus*), would that make a difference in the amount of time (output) the carrier must spend on passing by each? Please explain
- (b) Should carrier route miles to be covered within a zip code be considered a constraint on management efforts to minimize carrier delivery costs? Please explain.

RESPONSE TO ADVO/OCA-T3-6

[This interrogatory was filed with two parts labeled "b." I changed the first part to "a."]

(a) I would expect the answer to be yes. One would expect the length of time to pass by a delivery point to vary with the distances, given the *ceteris paribus* restriction

(b) Carrier route miles would be determined by management's decisions on route configurations as a result of a cost minimization process. Whether route miles would be a constraint would depend on the structure of the minimization model

RESPONSE OF OCA WITNESS J. EDWARD SMITH
TO INTERROGATORIES ADVO/OCA-T3-6-24

ADVO/OCA-T3- 8. On page 4, line 2, you claim that inclusion of the density variable in the city carrier analysis is incorrect. Please assume a hypothetical zip code where possible deliveries are placed uniformly inside the zip code and therefore distances between contiguous delivery points are exactly the same for all points. Do you believe that, for this hypothetical zip code, carrier drive/walk time would be influenced by:

- (a) Total possible deliveries? Please explain your response.
- (b) Distance between contiguous delivery points? Please explain your response.

RESPONSE TO ADVO/OCA-T3-8

(a) I would expect that the total amount of drive/walk time would be a function of the length of the routes. The relationship between the number of delivery points and drive/walk time would be a function of number of routes and route lengths.

- (b) Please see my response to (a).

RESPONSE OF OCA WITNESS J. EDWARD SMITH
TO INTERROGATORIESADVO/OCA-T3-6-24

ADVO/OCA-T3-10. On page 4 (lines 3-4), you state: "In the modeling of an economic process one generally expects to see the maximization or minimization of a process subject to some type of constraint. Although no theoretical analysis of the underlying economic process of mail delivery has been explicitly hypothesized in conjunction with the modeling effort, one could conclude that the equations model a cost function, with cost (measured in terms of time) as a function of output (pieces of mail delivered or collected plus coverage of the delivery points).

- (a) Based on your understanding of the carrier activities involved, please identify and describe all the constraints on the minimization of city carrier delivery costs.
- (b) Please identify and describe all the output (workload) variables you believe are appropriate for modeling city carrier delivery costs.
- (c) Do you believe that the "cost function" approach is appropriate for modeling city deliver.] carrier street costs? Please explain.

RESPONSE TO ADVO/OCA-T3-10

(a) Information explaining the city carrier delivery function has been presented in the testimonies of various Postal Service witnesses, including witnesses Coombs, Lewis, Stevens, Kelley, Baron, and Bradley in the current and previous cases. I have no knowledge other than what is in the testimony. One gets the impression that constraints could include, but not necessarily be limited to, types of delivery points, characteristics of the service territory, and characteristics of delivery technologies.

(b) The SAS based equations which I have provided have identified the output (workload) variables—e.g. types of mail and delivery points in the case of a cost curve. I have excluded density. Depending on further research and development of postal delivery economic analysis it is possible that additional variables may be found to be appropriate.

RESPONSE OF OCA WITNESS J. EDWARD SMITH
TO INTERROGATORIESADVO/OCA-T3-6-24

(c) Yes, as indicated in my testimony. In the discussion of the allocation of scarce resources economists frequently discuss resource demand functions, production functions, and cost functions. I believe that the cost function approach describes witness Bradley's efforts, and is useful in such an analysis.

RESPONSE OF OCA WITNESS J. EDWARD SMITH
TO INTERROGATORIES ADVO/OCA-T3-6-24

ADVO/OCA-T3-11. On page 6 (lines 8 -13), you state:

As a result of the consideration of [management] tradeoffs, the cost to deliver a quantity of mail is determined. Density is an output of the process, not an input to the process. Density is determined partly by how the route is designed and partly by the characteristics of the service territory. What drives cost are the management's decisions on how to utilize resources to accommodate whatever level of mail and service territory characteristics are present. . . However, ZIP code density - i.e., dp/sqm - is a function of the arrangement of the City Carrier delivery routes, which would be achieved through the determination of a least cost solution to a production function through the attainment of equalities between various marginal rates of technical substitution and input/price ratios in a cost minimization process. The value of the density variable is an output of the cost minimization process; density is not an input to the cost function.

- (a) Please explain your understanding of whether the USPS CCSTS model you criticize is a route-level or zip-code-level model.
- (b) Please explain your understanding as to how USPS management determines zip code territories.
- (c) Please explain your Understanding as to how USPS management can change the average amount of space among delivery points in a particular zip code territory.
- (d) Please explain how you would describe the delivery cost-causing characteristics of a zip-code service territory.

RESPONSE TO ADVO/OCA-T3-11

[The correct citation is page 6 (lines 8 – 23).]

(a) It is my understanding that Postal Service management focuses on mail delivery at both the route and ZIP code level. Witness Bradley models costs at the ZIP code level, although he also performed some analysis at the route level. I have provided estimates based on data at the ZIP code level. My criticism of the use of the density variable in the context of its usage in this case is applicable at either the ZIP code or route level

**RESPONSE OF OCA WITNESS J. EDWARD SMITH
TO INTERROGATORIES ADVO/OCA-T3-6-24**

(b) I have no direct knowledge of this, but I have learned the following from information provided by the Postal Service at http://www.usps.com/history/his2_75.htm:

ZIP Code

The change in character of the mail, the tremendous increase in mail volume, and the revolution in transportation, coupled with the steep rise in manpower costs, made adoption of modern technology imperative and helped produce the ZIP (Zoning Improvement Plan) Code.

Despite the growing transport accessibility offered by the airlines, the Post Office Department in 1930 still moved the bulk of its domestic mail by rail, massing, re-sorting, and redistributing it for long distance hauling through the major railroad hubs of the nation. More than 10,000 mail-carrying trains crisscrossed the country, moving round the clock into virtually every village and metropolitan area.

The railroads' peak year may have been 1930. By 1963, fewer trains, making fewer stops, carried the mail. In these same years, 1930-1963, the United States underwent many changes. It suffered through a prolonged and paralyzing depression, fought its second World War of the 20th century, and moved from an agricultural economy to a highly industrial one of international preeminence. The character, volume, and transportation of mail also changed.

The social correspondence of the earlier century gave way, gradually at first, and then explosively, to business mail. By 1963, business mail constituted 80 percent of the total volume. The single greatest impetus in this great outpouring of business mail was the computer, which brought centralization of accounts and a growing mass of utility bills and payments, bank deposits and receipts, advertisements, magazines, insurance premiums, credit card transactions, department store and mortgage billings, and payments, dividends, and Social Security checks traveling through the mail.

In June 1962, the Presidentially appointed Advisory Board of the Post Office Department, after a study of its overall mechanization problems, made several primary recommendations. One was that the Department give priority to the development of a coding system, an idea that had been under consideration in the Department for a decade or more.

Over the years, a number of potential coding programs had been examined and discarded. Finally, in 1963, the Department selected a

RESPONSE OF OCA WITNESS J. EDWARD SMITH
TO INTERROGATORIES ADVO/OCA-T3-6-24

system advanced by department officials, and, on April 30, 1963, Postmaster General John A. Gronouski announced that the ZIP Code would begin on July 1, 1963

Preparing for the new system was a major task involving realignment of the mail system. The Post Office had recognized some years back that new avenues of transportation would open to the Department and began to establish focal points for air, highway, and rail transportation. Called the Metro System, these transportation centers were set up around 85 of the country's larger cities to deflect mail from congested, heavily traveled city streets. The Metro concept was expanded and eventually became the core of 552 sectional centers, each serving between 40 and 150 surrounding post offices.

Once these sectional centers were delineated, the next step in establishing the ZIP Code was to assign codes to the centers and the postal addresses they served. The existence of postal zones in the larger cities, set in motion in 1943, helped to some extent, but, in cases where the old zones failed to fit within the delivery areas, new numbers had to be assigned.

By July 1963, a five-digit code had been assigned to every address throughout the country. The first digit designated a broad geographical area of the United States, ranging from zero for the Northeast to nine for the far West. This was followed by two digits that more closely pinpointed population concentrations and those sectional centers accessible to common transportation networks. The final two digits designated small post offices or postal zones in larger zoned cities.

ZIP Code began on July 1, 1963, as scheduled. Use of the new code was not mandatory at first for anyone, but, in 1967, the Post Office required mailers of second- and third-class bulk mail to presort by ZIP Code. Although the public and mailers alike adapted well to its use, it was not enough

(c) Unless the ZIP code is redefined I do not believe that USPS management can change the average amount of space among delivery points at the ZIP code level, as opposed to the route level

(d) Some of the factors that could affect cost could include route configurations, number of delivery points, area for delivery, route miles, mix and

RESPONSE OF OCA WITNESS J. EDWARD SMITH
TO INTERROGATORIESADVO/OCA-T3-6-24

salaries of employees, and probably other factors still to be considered. Not all of these factors would necessarily enter a cost function.

RESPONSE OF OCA WITNESS J. EDWARD SMITH
TO INTERROGATORIESADVO/OCA-T3-6-24

ADVO/OCA-T3-12. With respect to your CC6 and CCS7 models (No Density and No Collection Volume; DPS Case, No Density, No Collection Volume):

- (a) Please confirm that the CCSTS carrier times include collection time. If you cannot, please explain why not.
- (b) Please explain why you included this model and whether you would ever consider this an appropriate model.

RESPONSE TO ADVOIOCA-T3-12

- (a) Confirmed
- (b) I included this model for comparison against the DOIS models, which are based on a dataset that does not include collection volume. If one were prepared to assume some type of proportionality between collection volume and a type of volume for which one had data, then a model which did not include collection volume could be useful.

DOIS data are available on an ongoing basis, permitting timely updating of studies. The alternative to using an ongoing, available database appears to be the collection of data in special studies, such as the CCSTS database. Unfortunately, in the time between the database's development and the current case the Postal Service has substantially changed the collection process; customers can now request package pickup service. The collection process appears to have moved increasingly from the collection of a few letters in a mailbox to the collection of a possibly large number of parcels from some customers. This appears to render the CCSTS database obsolete. There are advantages in having data available in a timely and ongoing basis.

RESPONSE OF OCA WITNESS J. EDWARD SMITH
TO INTERROGATORIESADVO/OCA-T3-6-24

ADVO/OCA-T3-14. Please refer to the following variables in your preferred CC5 model on page 15 (Table 2): $let*dp$, $cf*dp$, $seq*dp$, $cv*dp$, and $spr*dp$.

- (a) Please confirm that these variables are cross-product variables obtained by multiplying each volume variable by total possible deliveries. If you cannot confirm, please explain the meaning of these variables.
- (b) If you do confirm (a), do you believe that the presence of these variables indicates that marginal costs for each volume variable will be affected linearly by changes in possible deliveries in your model specification? If not, please explain fully.

RESPONSE TO ADVO/OCA-T3-14

- (a) Confirmed
- (b) Yes, *ceteris paribus*. The marginal cost formula has been stated. In the

case of letters the formula is as follows :

$$mtl = (let*mlet + 2*let^2*mlet*mlet + lf*mlet*mcf + lse*mlet*mseq + lspr*mlet*mspr + ldp*mlet*mdp) / mlet;$$

There are interactions among the variables

RESPONSE OF OCA WITNESS J. EDWARD SMITH
TO INTERROGATORIESADVO/OCA-T3-6-24

ADVO/OCA-T3-16 . Please compare your preferred CCSTS model (CC5 Full Quadratic) to your preferred DOIS model (ND6 Technology Delivery points Restricted Quadratic).

- (a) Please confirm that in CC5 the letters variable contains only DPS letters while the flats variable includes cased letters and flats. If this is incorrect, please explain.
- (b) Please confirm that in ND6 letters include both DPS and cased letters while flats include only cased flats. If this is incorrect, please explain.
- (c) Please explain fully why you treated the cased letter, cased flat and DPS volume variables differently in your two recommended models.
- (d) You stated on page 12 that: "Based on my understanding of Postal Service delivery practices, the [CC5] equation seems to model actual carrier activities more closely." Conceptually, which version of cased letters and flats is the most appropriate? Please explain.
- (e) Please explain why you did not present a CCSTS or DOIS model that combines all the features you appear to prefer: i.e., lack of density, DPS, only letter variable, delivery points disaggregated by technology, and unrestricted quadratic.

RESPONSE TO ADVO/OCA-T3-16

- (a) Confirmed.
- (b) Flats contain both cased and auto flats. Otherwise, confirmed.
- (c) They are alternatives. In the case of CC5, based on data available from witness Bradley, this appears to be the best equation of the equations available. In particular, I believe that the modeling of letters as DPS, with other letter mail combined with flats is preferable.

RESPONSE OF **OCA** WITNESS J. EDWARD SMITH
TO INTERROGATORIES ADVO/OCA-T3-6-24

The directly analogous equation for the DOIS data was the Full Quadratic case of ND4. Assuming that one would argue in favor of the 3-bundle approach, this would be the desired case. However, I also believed that given that delivery point technology data were available, they should be used. This brings one to the consideration of ND5, where the marginal costs did not appear to comport with reality. Accordingly, this left ND6, which was consistent with witness Bradley's approach.

The basic issue under consideration in this answer is whether the 3-bundle approach is preferable to combining cased letters, cased flats, and auto flats. The issue is not the "best fit": the issue is the most reasonable model. I concluded that based on consistency with witness Bradley's approach that ND6 could be advocated. This is not, however, a matter which has been entirely resolved.

(d) I am referring to the Full Quadratic case of CC5.

(e) Please see my answer in subpart (c).

RESPONSE OF OCA WITNESS J. EDWARD SMITH
TO INTERROGATORIESADVO/OCA-T3-6-24

ADVO/OCA-T3-17. In developing econometric models that are structured according to sound economic principles and, in this case, known operational behaviors on the part of city carriers, is it your view that variables that are known to affect city carrier costs in specific ways should be treated differently across all model versions that are tested?

RESPONSE TO ADVO/OCA-T3-17

NO.

RESPONSE OF OCA WITNESS J. EDWARD SMITH
TO INTERROGATORIESADVO/OCA-T3-6-24

ADVO/OCA-T3-18 Please consider the following general proposition with respect to model development and explain fully whether you agree or disagree with it. The correct model selection procedure in econometrics starts with developing a model that can be justified from economic theory. This generally includes selecting the appropriate independent variables that are believed to cause (and not just correlate with) costs and structure the model so that expected cost behaviors are described with reference to variations in the selected variables. Thus, the modeling procedure involves defining and applying variables consistently, given the available data. It should not include selecting variables based on best statistical fits.

RESPONSE TO ADVO/OCA-T3-18

I agree

RESPONSE OF OCA WITNESS J. EDWARD SMITH
TO INTERROGATORIES ADVO/OCA-T3-6-24

ADVO/OCA-T3-24

On page 8, (lines 21-24), you state that: ". . . further specification of an economic [city delivery cost] model would be appropriate." And on page 16 (lines 7-10), you state that the DOIS database has been available only for a short time and ". . . significantly more time would be required for a thorough analysis. Due the to the limited amount of time, I have been able to apply minimal quality control procedures and have not yet made full use of all of the data."

- (a) Given that city carrier delivery cost modeling has been considered in virtually every postal rate case, has there been sufficient time to conduct a theoretical analysis of the underlying economic process of mail delivery?
- (b) Given that the CCSTS database has been available for over a year, have you had sufficient time to develop an appropriate economic specification for a city delivery cost model?
- (c) Given that the CCSTS database has been available for over a year, have you had sufficient time to apply all necessary quality control procedures to it? Please explain.

RESPONSE TO ADVO/OCA-T3-24

(a) Witness Bradley's pioneering analysis of delivery cost modeling was presented in Docket No. R2005-1. It is my understanding that additional cost modeling information is being considered on an ongoing basis. Since there appears to be the prospect for additional development of information in this area, I must provide a negative answer to your question.

(b) Since I have not done so, my answer again is negative.

(c) The database has been subject to review for quality control before the Commission. Quality control issues need special consideration before and during data collection. After data collection we are left with the data which have been obtained. My primary focus has been on modeling issues.

RESPONSES OF OCA WITNESS J. EDWARD SMITH
TO INTERROGATORIESADVO/OCA-T3-25-32

ADVO/OCA-T3-26. Please refer to OCA LR L-4, Section 2, ReadVolume SAS program, on the first page under "Deleting missing time data and setting missing data for a number of variables equal to zero." For observations in which the following variables contained missing data, values for these variables were set to zero. The variables are: autoflats, autoltrs, casflts, casltrs, DPS, miles, prcl, pri, seqflts, and seqltrs.

(a) Please explain your rationale behind setting values for these missing data equal to zero.

(b) Did you attempt to check this assumption with the individuals at the USPS who are responsible for the DOIS data collection and database? Please explain.

(c) Do you consider setting the missing data values equal to zero less arbitrary than setting these values equal to other values, such as one, five, ten, etc.?

(d) Since true values for variables with missing values are unknown, please explain how your treatment is better than deleting observations with missing values from the database.

(e) Please confirm that if missing data observations contain no new information relative to that contained in non-missing data, then parameter estimates for variables using non-missing data remain unbiased. If you cannot confirm, please explain fully.

(f) Please confirm that the loss of efficiency from higher variances for parameter estimates formed from deleting observations decreases as sample sizes get larger. If you cannot confirm, please explain fully.

(g) Did you consider and pursue any other methods for treating missing variable observations other than assigning zero values to the indicated variables? If so, please provide any results related to such analyses. If not, please explain why you did not pursue any alternative treatments.

(h) Please explain fully why in the indicated section of the SAS program you deleted observations with zero values for the street-hours, yet you assigned zero values to the volume variables when data for such variables were missing.

RESPONSE TO ADVOIOCA-T3-26

(a) Please see my answer to USPS/OCA-T3-8 (b)-(c).

(b) No. Also, please see my answer to USPS/OCA-T3-8 (b)-(c).

RESPONSES OF OCA WITNESS J. EDWARD SMITH
TO INTERROGATORIES ADVO/OCA-T3-25-32

- (c) Yes.
- (d) On the assumption that the values *are* zero, my treatment is better. Also, please *see* my answer to USPS/OCA-T3-8 (b)-(c).
- (e) Confirmed.
- (f) Confirmed.
- (g) I have not yet done so as of the filing of this interrogatory. Since I received **the** DOIS data so close to the filing deadline for my testimony, time did not permit alternative treatments.
- (h) A regression with zero value for street-hours would be meaningless.

RESPONSES OF OCA WITNESS J. EDWARD SMITH
TO INTERROGATORIES ADVO/OCA-T3-25-32

ADVO/OCA-T3-27. Again, please refer to your SAS program Readvolume contained in OCA-LR-L-4 and the section of your code prefaced by "the procedure below assumes that missing data is zero rather than deleting the data - this is an important assumption." This specific assumption applies to missing data for the volume variables.

(a) Please explain fully why you consider this distinction and consequential treatment of the missing data an important assumption.

(c) Please explain if you expected any additional missing data (compared to those "cleaned up" earlier in the program) for the same variables to be present in the new Volume data set within this section and why.

(d) If you did not expect any new missing data to be present, why were values of zero reassigned once again to the same variables? Please explain fully.

(e) Please confirm that within the indicated section, two new variables, seq-letters-sets and seq_flats_pcs are now scanned for missing values and are assigned a value of zero for observations where missing data exist. If you cannot confirm, please explain.

(f) If you do confirm, please explain why these two variables were not included in the original scan referenced in the previous question?

(g) If there were actually missing non-zero values for those particular observations, please explain how you believe the models would be affected.

Response to ADVO/OCA-T3-27

(a) The assumption will determine the inclusion/exclusion of a number of observations in the database.

(b) There is no (b) subpart

(c) No. This is my programming preference

(d) This is my programming preference

(e) Confirmed.

(f) Neither of the variables is actually used in this program. They were simply included under a blanket inclusion

RESPONSES OF OCA WITNESS J. EDWARD SMITH
TO INTERROGATORIES ADVO/OCA-T3-25-32

(g) Neither variable is used in the form listed. There would be no effect.

RESPONSES OF OCA WITNESS J. EDWARD SMITH
TO INTERROGATORIES ADVO/OCA-T3-25-32

ADVO/OCA-T3-28. Please refer again to your SAS program Readvolume contained in Section 2 of OCA-LR-L-4. The last section of your program is "Final Data Cleaning".

(a) Please confirm that the purpose of this section of the program is:

1) to delete all observations containing either missing or zero valued data for the DELT variable, and 2) to reassign a zero value to all other variables identified in this section containing missing data. If you cannot confirm, please explain.

(b) Please confirm that, within this last section and with the exception of the DELT variable, the same variables identified in the previous two questions are again reassigned a zero value for observations in which their data are missing. If you cannot confirm, please explain.

(c) Please explain why you expected additional missing data for all variables indicated in this last section of the program to be present in the Volume data set.

(d) If you did not expect any new missing data to be present, why were values of zero reassigned once again to the same variables? Please explain fully.

(e) Please confirm that the variable seq-flats-sets, included in the SAS data file FNVOLADJ, filed as part of OCA LR L-4, is also included in the final VOLUME data set formed in the program, in the indicated last section of the program. If you cannot confirm, please explain.

(f) If you do confirm, please explain why the seq-flats-sets variable contained in this data set was not checked for missing data, as were the other indicated variables.

RESPONSE TO ADVO/OCA-T3-28

(a) Confirmed

(b) Confirmed

(c) I did not. This is my programming style

(d) This is my programming style

(e) Confirmed

(f) The variable is at this point redundant.

RESPONSES OF OCA WITNESS J. EDWARD SMITH
TO INTERROGATORIESADVO/OCA-T3-25-32

ADVO/OCA-T3-29. Please refer again to your SAS program Readvolume contained in Section 2 of OCA LR L-4. After you merge your Volume data set with the CombinedZips data set containing a distribution of possible delivery values by type of delivery for each zip and route, you include the following lines of SAS code:

DATA volume;

SET volume;

if residential-curb="." then delete;

(a) Please confirm that the new data set Volume referenced in the DATA statement, now excludes all zip-route-day observations where the residential-curb variable contains missing data. If you cannot confirm, please explain.

(b) Please explain why you did not delete any observations with missing values for the remaining seven possible delivery values: residential NDCBU, residential central, residential other, business curb, business NDCBU, business central and business other. Did you run a separate check on these variables not included in the SAS code? Please explain fully.

RESPONSE TO ADVO/OCA-T3-29

(a) Confirmed

(b) An inspection of the data indicated that the earlier deletion would handle all cases.

RESPONSES OF OCA WITNESS J. EDWARD SMITH
TO INTERROGATORIESADVO/OCA-T3-25-32

ADVO/OCA-T3-30. Please refer to the SAS data file *fnvoladj*, filed as part of Section 2 in OCA LR L-4. Please explain the distinction between the SEQ_FLATS_PCS and SEQFLTS variables included in the file.

RESPONSE TO ADVO/OCA-T3-30

The variables are identical. SEQ_Flats_PCS has not been used as a variable.

RESPONSES OF OCA WITNESS J. EDWARD SMITH
TO INTERROGATORIES ADVO/OCA-T3-25-32

ADVO/OCA-T3-31. Please refer to the SAS data file fnlvoladj, filed as part of OCA LR L-4.

- (a) Please explain your understanding of the MILES and LAND variables indicated in the file. Does the MILES variable include all route miles covered by the carrier to complete delivery (travel, run time, traveling between route sections, etc.) or just a portion of these miles? Does the LAND variable include all square miles for zip codes in which routes are located, or just a portion of these miles? Please explain fully.
- (b) Do you believe that, among other factors, the sum of route miles for all routes within a particular zip code would be influenced by that zip's square miles in area? Please explain fully.
- (c) Suppose volume attributable to a particular zip code suddenly doubled requiring an increase in routes, but no increase in the number of zip-codes serving the defined geographic area. Please explain fully what influence you would expect the increased workload to have on the MILES variable for that zip code.

RESPONSE TO ADVO/OCA-T3-31

- (a) Miles are base vehicle miles. See interrogatory OCA/USPS-T14-8. Land is square miles in the ZIP code and is exclusive of water.
- (b) I don't know.
- (c) I don't know what effect a doubling of volume to a particular ZIP code would have on numbers of routes or whether the ZIP code structure would be unaffected. The matter is purely speculative. Speculating, I tend to think that miles would not increase substantially, but I may be wrong

RESPONSES OF OCA WITNESS J. EDWARD SMITH
TO INTERROGATORIESADVO/OCA-T3-25-32

ADVO/OCA-T3-32. Please confirm that OCA LR L-4, Section 2, fnlvoldj SAS data set is the data set used to develop your DOIS models (described in your Section 3 SAS programs as newdois.fnlvolume) and that it is the same as the "volume" data set generated by the Readvolume SAS program in the same section. If this is incorrect, please provide the correct data set in machine-readable format.

RESPONSE TO ADVO/OCA-T3-32.

Partly confirmed and partly denied. The results can be generated from either database:

I used newdois.fnlvolume. Unencoded ZIP code information has been deleted from fnlvoldj. Otherwise the databases are identical.

RESPONSES OF OCA WITNESS J. EDWARD SMITH
TO INTERROGATORIES ADVO/OCA-T3-33-56

ADVO/OCA-T3-33. With respect to the DOIS data, please provide your understanding of the following and provide the sources for your understanding:

- (a) Purposes for which the data were originally collected and any changes in those purposes over time.
- (b) How the DOIS data have been used by postal management over time.

RESPONSE TO ADVO/OCA-T3-33

(a) My understanding of DOIS is based on information presented in Docket No. R2005-1 in testimony and interrogatory responses. The Delivery Operations Information System (DOIS) provides Delivery Unit supervisors with operations data for management and decision making purposes. For example, supervisors are able to compare actual work hours used to projected work hours required, as well as use the data in achieving operating efficiency on the routes they manage.

- (b) See (a). I have no further information.

RESPONSES OF OCA WITNESS J. EDWARD SMITH
TO INTERROGATORIESADVO/OCA-T3-33-56

ADVO/OCA-T3-34. With respect to the DOIS data, please provide your understanding of the following and the sources for your understanding:

- (a) Portions of the city carrier system the data represent (by year)
- (b) The types of zip codes/routes/carriers for which DOIS does not collect information - and any changes over time.
- (c) Number of city letter and special purpose routes and carriers represented in DOIS by year
- (d) Total number of city letter and special purpose routes and carriers in the postal system by year

RESPONSE TO ADVO/OCA-T3-34

(a) It is my understanding that in 2005 DOIS covered approximately 158,000 city routes, over 96 percent of city carrier routes, as reported in Tr. 8D/4782-83, Docket No. R2005-1.

(b) I have searched the testimony and interrogatory responses of the Postal Service in Docket No. R2005-1, which contained explanatory material about DOIS, but I have been unable to find an answer to your question

(c) See (a).

(d) It is my understanding that there are approximately 164,000 routes, according to Tr. 8D/4784.

RESPONSES OF OCA WITNESS J. EDWARD SMITH
TO INTERROGATORIESADVO/OCA-T3-33-56

ADVO/OCA-T3-35. Please provide your understanding of all critiques of the DOIS data, DOIS data collection activities, and/or usefulness of the DOIS data for its intended purposes. Please also provide the sources for your understanding.

RESPONSE TO ADVO/OCA-T3-35

I have searched the testimony and interrogatory responses of the Postal Service in Docket No. R2005-1, which contained explanatory material about DOIS, but I have been unable to find an answer to your question.

RESPONSES OF OCA WITNESS J. EDWARD SMITH
TO INTERROGATORIESADVO/OCA-T3-33-56

ADVO/OCA-T3-36. Please identify and describe all the data and information categories collected by the USPS that are included within DOIS. If these have changed over time, please also specify the changes. Please provide the sources for your understanding.

RESPONSE TO ADVO/OCA-T3-36

While the following materials provided by the Postal Service in Docket No. R2005-1 may not be exhaustive, they do contain extensive information about DOIS data and categories: Tr. 6/1941, 1971, and 2338-51; Tr. 8/4781-4827 and 4908-11; and Tr. 14/6578-80.

RESPONSES OF OCA WITNESS J. EDWARD SMITH
TO INTERROGATORIESADVO/OCA-T3-33-56

ADVO/OCA-T3-37. With respect to the DOIS data base:

- (a) Please identify and describe any difficulties the **USPS** incurred over time in collecting, measuring, standardizing, cleaning, or processing the DOIS data. Please provide the sources for your information.
- (b) Please identify and describe any corrections, modifications, or other changes the USPS made to ensure that the difficulties in (a) were eliminated. Please provide the sources for your information.
- (c) Please identify the extent to which DOIS route-day-level observations, on an annual basis, must be corrected in some way during USPS quality control procedures. Please provide the sources for your information.

RESPONSE TO ADVO/OCA-T3 37

(a) – (c) I have searched the testimony and interrogatory responses of the Postal Service in Docket No. R2005-1, which contained explanatory material about DOIS. but I have been unable to find an answer to your question.

RESPONSES OF OCA WITNESS J. EDWARD SMITH
TO INTERROGATORIES ADVO/OCA-T3-33-56

ADVO/OCA-T3-38. Please explain your understanding of the following and provide the sources for your understanding:

- (a) If DOIS is implemented within a zip code, **does** it apply to all city carriers/routes within that zip code? Please explain.
- (b) Does DOIS collect data for all routes/carrier in a [DOIS] zip code on all route-days of the year?
- (c) Do the DOIS data include information on both letter and special purpose route carriers in each [DOIS] zip code?
- (d) How do you tell when zero time or volume data for a zip-route-day is due to a non-delivery day vs. due to uncollected or deleted data?

RESPONSE TO ADVO/OCA-T3-38

- (a) Initially DOIS was applied to all units with 8 or more routes. See Tr 8D/4782, Docket No. R2005-1. I do not know if it has been extended
- (b) It is my understanding that DOIS collects data for all DOIS routes on all days with mail delivery
- (c) – (d) I have searched the testimony and interrogatory responses of the Postal Service in Docket No. R2005-1, which contained explanatory material about DOIS, but I have been unable to find an answer to your question.

RESPONSES OF OCA WITNESS J. EDWARD SMITH
TO INTERROGATORIESADVO/OCA-T3-33-56

ADVO/OCA-T3-39. Please describe the extent to which, in the DOIS database, some data elements within route/harrier-day observations, some full route/carrier-day observations, or some full zip code observations are either not collected or are subsequently eliminated by quality control. Please explain and provide the source of your understanding.

RESPONSE TO ADVO/OCA-T3-39

I have searched the testimony and interrogatory responses of the Postal Service in Docket No. R2005-1, which contained explanatory material about DOIS, but I have been unable to find an answer to your question.

RESPONSES OF OCA WITNESS J. EDWARD SMITH
TO INTERROGATORIES ADVO/OCA-T3-33-56

ADVO/OCA-T3-40. Please provide a description of the USPS standardization, quality control procedures, and ~~data/information~~ manipulation procedures applied to the DOIS data over time. Please provide the source of your understanding.

RESPONSE TO ADVOIOCA-T3-40

I have searched the testimony and interrogatory responses of the Postal Service in Docket No. R2005-1, which contained explanatory material about DOIS, but I have been unable to find an answer to your question.

RESPONSES OF OCA WITNESS J. EDWARD SMITH
TO INTERROGATORIESADVO/OCA-T3-33-56

ADVO/OCA-T3-41. Please confirm that the data in the vol_data SAS dataset in USPS LR L-160 were the input to the ReadVolume SAS Program in Section 2 of OCA LR-4. If this is incorrect, please explain why and identify the source of the data used in that program.

RESPONSE TO ADVOIOCA-T3-41

Confirmed.

RESPONSES OF OCA WITNESS J. EDWARD SMITH
TO INTERROGATORIES ADVO/OCA-T3-33-56

ADVO/OCA-T3-42. Do the DOIS data in OCA LR L-4, fnlvoladj SAS database file include data on both letter and special purpose route carriers? Please provide the sources supporting your answer.

RESPONSE TO ADVO/OCA-T3-42

I believe only letter routes are included, not special purpose routes. Please see USPS-T-16 at 15, lines 14-15, Docket No. R2005-1. The DOIS data OCA requested in this proceeding come from the same ZIP codes and routes that witness Kelley spoke of in the cited testimony.

RESPONSES OF OCA WITNESS J. EDWARD SMITH
TO INTERROGATORIES ADVO/OCA-T3-33-56

ADVO/OCA-T3-43. Please explain whether an observation as presented in OCA LR L-4, fnlvoladj SAS database file, represents a route-day or a carrier-day. Please provide the sources supporting your explanation.

RESPONSE TO ADVO/OCA-T3-43

Based on information from the Postal Service, I understand that the data cover a route-day.

RESPONSES OF OCA WITNESS J. EDWARD SMITH
TO INTERROGATORIESADVO/OCA-T3-33-56

ADVO/OCA-T3-44. In OCA LR L-4, fnlvoladj SAS database file, please explain your understanding and provide the sources for your understanding:

- (a) If a zip code is represented in the data, are all routes and carriers for all days of that zip code represented?
- (b) If a day is represented in the data, are all possible DOIS zips for that day represented?

RESPONSE TO ADVO/OCA-T3-44

(a) According to witness Kelley (see USPS-T-16 at 15), this should be true (so long as you are referring to city carriers, not rural carriers). But I have not checked to see if this is always the case.

(b) Assuming you are asking about CCSTS ZIPs, then this should be true. But I have not checked to see if this is always the case

RESPONSES OF OCA WITNESS J. EDWARD SMITH
TO INTERROGATORIES ADVO/OCA-T3-33-56

ADVO/OCA-T3-45. With respect to the street hours variable in the DOIS data in OCA LR L-4, fnlvoldj SAS database file, please provide your understanding of the following and provide the sources for your understanding:

- (a) How street hours were quantified and by who
- (b) How the collection of these data was standardized over time
- (c) Any changes in how these data were collected or measured over time
- (d) What is included in these data - e.g., all clocked street time, lunch, breaks, emergency downtime, temporary assistance on the route, etc. - and any changes over time in what was included in those hours
- (e) How the collection of these hours was standardized over time and over zips and routes.
- (f) Specific quality control procedures applied to the collected data - and any changes over time in those procedures

RESPONSE TO ADVO/OCA-T3-45

(a) The street hours ~~were~~ quantified by the Postal Service. I do not know the procedures they used

(b) - (c) I have searched the testimony and interrogatory responses of the Postal Service in Docket No. R2005-1, which contained explanatory material about DOIS, but I have been unable to find an answer to your question.

(d) My understanding is that all of the times listed in this question should be included in the data

(e) - (f) I have searched the testimony and interrogatory responses of the Postal Service in Docket No. R2005-1, which contained explanatory material about DOIS, but I have been unable to find an answer to your question.

RESPONSES OF OCA WITNESS J. EDWARD **SMITH**
TO INTERROGATORIES ADVO/OCA-T3-33-56

ADVO/OCA-T3-46. In OCA LR L-4, fnlvoladj SAS database file, are all the volume variables in numbers of delivered pieces? Please explain.

RESPONSE TO ADVO/OCA-T3-46

Yes.

RESPONSES OF OCA WITNESS J. EDWARD **SMITH**
TO INTERROGATORIES ADVO/OCA-T3-33-56

ADVO/OCA-T3-47. With respect to the cased letter and cased flat volumes data in the DOIS data in OCA LR L-4, fnlvoladj SAS database file, please provide your understanding of the following and the sources for your understanding:

- (a) The definition of "cased letters"
- (b) The definition of "cased flats"
- (c) How these volumes were collected and measured
- (d) **Who** collected and measured these volumes and when
- (e) How the collection of these volumes was standardized over time and over zips and routes
- (f) Any changes in how those volumes were collected over time
- (g) Specific quality control procedures applied to these volume data and any changes over time in those procedures

A RESPONSE TO ADVO/OCA-T3-47

(a) Based on my visits to delivery units, I have learned that "cased letters" are letters cased by the carrier. See also Tr. 8D/4805, and USPS-LR-K-128 at 6, Docket No. R2005-1.

(b) Based on my visits to delivery units, I have learned that "cased flats" are flats cased by the carrier. See also Tr. 8D/4805 and USPS-LR-K-128 at 7.

(c) - (d) It is my understanding that the Delivery Unit supervisor is responsible for the measurement of the volumes on a daily basis. End of Run reports furnish some of the data. while manual counts must sometimes be made by delivery supervisors. When necessary, linear feet of product are converted to units. See Tr. 8D/4790-4805 and USPS-LR-K-128.

RESPONSES OF OCA WITNESS J. EDWARD SMITH
TO INTERROGATORIES ADVO/OCA-T3-33-56

(e) – (g) I have searched the testimony and interrogatory responses of the Postal Service in Docket No. R2005-1, which contained explanatory material about DOIS, but I have been unable to find an answer to your question.

RESPONSES OF OCA WITNESS J. EDWARD SMITH
TO INTERROGATORIESADVO/OCA-T3-33-56

ADVO/OCA-T3-48. With respect to total DPS letter and automated letter volumes data in the DOIS data in OCA LR L-4, fnlvoldj **SAS** database file, please provide your understanding of the following and the sources for your understanding:

- (a) The definition of "DPS letters"
- (b) The definition of "automated letters"
- (c) How these volumes were collected and measured
- (d) Who collected and measured these volumes and when
- (e) How carriers treat these volumes in-office (case, separate bundle, etc.)
- (f) How the collection of these volumes was standardized over time and over zips and routes
- (g) Any changes in how these volumes were collected over time
- (h) Specific quality control procedures applied to the these volume data and any changes over time in those procedures

RESPONSE TO ADVO/OCA-T3-48

- (a) "DPS letters" are Delivery Point Sequenced letters. See Tr. 8D/4790, Docket No. R2005-1.
- (b) "Automated letters" are letters which have been sorted to the carrier level by machine at the sorting plant. See Tr. 8D/4790 and 4805.
- (c) It is my understanding that the volumes are read from the sorting machine meters. See Tr. 8D/4790.
- (d) USPS-T-30 at 6, Docket No. R2005-1, provides some of the requested information.
- (e) "Automated letters" are cased; "DPS letters" go to the street as a bundle.

**RESPONSES OF OCA WITNESS J. EDWARD SMITH
TO INTERROGATORIESADVO/OCA-T3-33-56**

(f) – (g) I have searchsd the testimony and interrogatory responses of the Postal Service in Docket No. R2005-1, which contained explanatory material about DOIS, but I have been unable to find an answer to your question.

RESPONSES OF OCA WITNESS J. EDWARD SMITH
TO INTERROGATORIESADVO/OCA-T3-33-56

ADVO/OCA-T3-49. With respect to automated flat volumes data in the DOIS data in OCA LR L-4, fnlvladj SAS database file, please provide your understanding of the following and the sources for your understanding:

- (a) The definition of "automated flats"
- (b) How carriers treat these volumes in-office (case, separate bundle, etc.)
- (c) How these volumes were collected and measured
- (d) Who collected and measured these volumes and when
- (e) How the collection of these volumes was standardized over time and over zips and routes
- (f) Any changes in how those **volumes** were collected over time
Specific quality control procedures applied to the these volume data
and any changes over time in those procedures

RESPONSE TO ADVO/OCA-T3-49

(a) Automated flats are sorted on equipment at the sorting plant to the carrier route level. See Tr. 8D/4805 and 4826; and Tr. 14/6578, Docket No. R2005-1.

(b) Automated flats are cased by the carrier. See Tr. 8D/4805 and Tr. 14/6578.

(c) I understand that volumes are obtained from machine count (End of Run reports). See Tr. 8D/4805 and Tr. 14/6578.

(d) - (f) I have searched the testimony and interrogatory responses of the Postal Service in Docket No. R2005-1, which contained explanatory material about DOIS. but I have been unable to find an answer to your question.

RESPONSES OF OCA WITNESS J. EDWARD SMITH
TO INTERROGATORIESADVO/OCA-T3-33-56

ADVO/OCA-T3-50. In OCA LR-4, fnlvoldj SAS database file, there are four variables entitled: Sequenced Letters, Sequenced Flats, Sequenced Letter Sets, Sequenced Flat Sets. Please provide your understanding of the following and the sources for your understanding.

- (a) The definitions of "sequenced letters" and "sequenced flats"
- (b) The definition of "set" - e.g., if a saturation mailing is split between two days, are the volumes for each day recorded so that two sets are recorded, one *on* each day?
- (c) How carriers treat these volumes in-office (case, separate bundle, etc.)
- (d) How these volumes were collected and measured
- (e) Who collected these volumes and when
- (f) How the collection of these volumes was standardized over time and over zips and routes
- (g) Any changes in how those volumes were collected over time
- (h) Specific quality control procedures applied to the these volume data and any changes over time in those procedures

RESPONSE TO ADVOIOCA-T3-50

- (a) Sequenced letters are letters received by the Postal Service from the mailer in sequenced form. Sequenced **flats** are similarly received. See USPS-LR-K-128 at 8 and Tr. 8D/4807, Docket No. R2005-1.
- (b) A "set" is a sequential mailing. I would assume that splitting a mailing between two days would create two sets. However, I have not used the set variable in my analysis, so my understanding is irrelevant at this time. See USPS-LR-K-128 at 8.
- (c) Sets go to the street without further processing. See USPS-LR-K-128 at 8 and Tr. 8D/4807.

RESPONSES OF OCA WITNESS J. EDWARD SMITH
TO INTERROGATORIESADVO/OCA-T3-33-56

(d) USPS-LR-K-128 at 5 and 9 contains some information on this subject

(e) USPS-LR-K-128 and USPS-T-30 at 6 contain some information on this
subject

(f) – (h) I have searched the testimony and interrogatory responses of the
Postal Service in Docket No. R2005-1, which contained explanatory material about
DOIS, but I have been unable to find an answer to your question.

RESPONSES OF OCA WITNESS J. EDWARD SMITH
TO INTERROGATORIES ADVO/OCA-T3-33-56

ADVO/OCA-T3-51. In OCA LR-4, fnlvoladj SAS database file, there is a parcels volume variable and a priority volume variable. Please provide your understanding of the following and the sources for your understanding.

- (a) The definition of "parcel" and identification of all the types of mail pieces and subclasses that may be included within that volume
- (b) The definition of "priority" and identification of all the shapes and subclasses that may be included within that volume
- (c) How carriers treat these "parcels" and "priority" volumes in-office
- (d) How carriers treat these "parcels" and "priority" volumes out-of-office
- (e) How these volumes were collected and measured
- (f) Who collected these volumes and when
- (g) How the collection of these volumes was standardized over time and over zips and routes
- (h) Any changes in how those volumes were collected over time
- (i) Specific quality control procedures applied to these volume data and any changes over time in those procedures

RESPONSE TO ADVO/OCA-T3-51

- (a) Parcels are exactly what the name implies.
- (b) Priority Mail is a product that receives special, priority treatment. Pieces may be letter-, flat-, or parcel-shaped
- (c) Some types of small parcels and Priority Mail may be combined with other mail during casing
- (d) Parcels and Priority Mail are delivered with other mail, depending on whether they were cased.

RESPONSES OF OCA WITNESS J. EDWARD SMITH
TO INTERROGATORIESADVO/OCA-T3-33-56

(e) – (i) I have searched the testimony and interrogatory responses of the Postal Service in Docket No. R2005-1, which contained explanatory material about DOIS, but I have been unable to find an answer to your question.

RESPONSES OF OCA WITNESS J. EDWARD SMITH
TO INTERROGATORIES ADVO/OCA-T3-33-56

ADVO/OCA-T3-52. In OCA LR-4. fnlvoladj SAS database file, there is a "route mileage" volume variable. Please provide your understanding of the following and the sources for your understanding.

- (a) The definition of "route mileage" and itemization of the distances included (e.g., travel to and from route, travel between route segments, travel within a route segment, travel along a series of curblane boxes, travel to relay/collection boxes, etc.)
- (b) How these mileages were collected and measured
- (c) Who collected and measured these mileages
- (d) How the collection of these mileages were standardized over time and over zips and routes
- (e) Any changes in how those mileages were collected over time
- (f) Specific quality control procedures applied to the these data and any changes over time in those procedures

RESPONSE TO ADVO/OCA-T3-52

(a) – (b) Tr. 8D/4808, Docket No. R2005-1, indicates that route base mileage is the difference between the ending odometer reading and the beginning odometer reading.

(c) – (f) I have searched the testimony and interrogatory responses of the Postal Service in Docket No. R2005-1, which contained explanatory material about DOIS, but I have been unable to find an answer to your question.

RESPONSES OF OCA WITNESS J. EDWARD SMITH
TO INTERROGATORIESADVO/OCA-T3-33-56

ADVO/OCA-T3-53. The Zip Code Delivery Points data included in OCA LR-4, fnlvolaadj SAS database file, appear to come from the files in the Zip Code Delivery Points folder included in OCA LR-4, Section 2. Please provide your understanding of the following and the sources for your understanding.

- (a) The definition of and units of measurement for each type of delivery type - e.g., are these total addresses or stops, what are the distinctions among types of delivery, etc.
- (b) How were these variables were quantified over time
- (c) How the definitions ana quantifications were standardized over time and over zips and routes
- (d) Any changes over time in how those definitions and quantification was made
- (e) Specific quality control procedures applied to these data and any changes over time I those procedures.

RESPONSE TO ADVO/OCA-T3-53

(a) The delivery points are defined as the number of delivery points by type of delivery technology.

(b) They were provided by the Postal Service. See Tr. 8D/4910.

(c) - (e) I have searched the testimony and interrogatory responses of the Postal Service in Docket No. R2005-1, which contained explanatory material about DOIS. but I have been unable to find an answer to your question.

RESPONSES OF OCA WITNESS J. EDWARD SMITH
TO INTERROGATORIES ADVO/OCA-T3-33-56

ADVO/OCA-T3-54. In OCA LR-4, fnlvoladj **SAS** database file, there is an "hunit" variable. This appears to come from the ahactzips.xls file in Section 2 of OCA LR-4. Please provide your understanding of the following and the sources for your understanding.

- (a) The definition of this variable
- (b) Source of this variatle
- (c) Time period for which this variable is appropriate

RESPONSE TO ADVO/OCA-T3-54

(a) – (c) "hunit" is "housing units." See my response to interrogatory USPS/OCA-T3-7.

RESPONSES OF OCA WITNESS J. EDWARD SMITH
TO INTERROGATORIESADVO/OCA-T3-33-56

ADVO/OCA-T3-55. In OCA LR-4, fnlvoladj SAS database file, there *is* a "COMM" variable. This appears to come from the ahactzips.xls file in Section 2 of OCA LR-4. Please provide your understanding of the following and the sources for your understanding.

- (a) The definition of this variable
- (b) Source of this variable
- (c) Time period for which this variable is appropriate

RESPONSE TO ADVO/OCA-T3-55

(a) – (c) "COMM is "commercial units." See my response to interrogatory

USPS/OCA-T3-7.

RESPONSES OF OCA WITNESS J. EDWARD SMITH
TO INTERROGATORIESADVO/OCA-T3-33-56

ADVO/OCA-T3-56. In OCA LR-4, finlvoldj SAS database file, there is a "Land" variable. This appears to come from the ahactzips.xls file in Section 2 of OCA LR-4. Please provide your understanding of the following and the sources for your understanding.

- (a) The definition of this variable, including what the area it is intended to cover and whether it includes both dry land and water
- (b) Identification of units of measurement
- (c) Source of this variable
- (d) Time period for which this variable is appropriate

RESPONSE TO ADVO/OCA-T3-56

- (a) Square miles of dry land in a **ZIP** code.
- (b) Square Miles.
- (c) - (d) See my response to interrogatory USPS/OCA-T3-7.

1 CHAIRMAN OMAS: Now this brings us to oral
2 cross-examination. Mr. Koetting?

3 MR. KOETTING: Thank you, Mr. Chairman.
4 Upon review of Dr. Smith's interrogatory answers that
5 he filed yesterday afternoon, the Postal Service does
6 not have any oral cross-examination.

7 However, I would like to clarify for the
8 record that those interrogatory responses which were
9 to USPS/OCA-T3-24 through 26 were included in the
10 packet previously handed the reporter, and I would ask
11 Dr. Smith if those questions were asked of him orally
12 today his answers would be the ones he furnished in
13 writing yesterday.

14 THE WITNESS: They would be

15 MR. KOETTING: Since that's already in the
16 packet, Mr. Chairman, I don't believe I need to do
17 anything more with him. We have no further cross-
18 examination beyond that.

19 CHAIRMAN OMAS: Is there any other
20 participant who wishes to cross-examine Witness Smith?

21 (No response.)

22 CHAIRMAN OMAS: Are there any questions from
23 the bench?

24 (No response.)

25 CHAIRMAN OMAS: Mr. Costich, therefore you

1 have no redirect I'm sure.

2 Mr. Smith, that completes your testimony
3 here today. We appreciate your appearance and your
4 contribution to our record. You are now excused.

5 THE WITNESS: Thank you.

6 (Witness excused.)

7 CHAIRMAN OMAS: This concludes today's
8 hearings.

9 We will reconvene tomorrow morning at 9:30
10 when we will receive testimony from Witnesses Carlson,
11 Paul, Roberts, Neels and Haldi.

12 Thank you very much. Have a good day.

13 (Whereupon, at 10:22 a.m. the hearing in the
14 above-entitled matter was adjourned, to reconvene at
15 9:30 a.m. on Friday, October 27, 2006.)

16 //

17 //

18 //

19 //

20 //

21 //

22 //

23 //

24 //

25 //

8187

REPORTER'S CERTIFICATE

DOCKET NO.: R2006-1


CASE TITLE: Postal Rate and Fee Changes

HEARING DATE: 10/26/06

LOCATION: Washington, D.C.

I hereby certify that the proceedings and evidence are contained fully and accurately on the tapes and notes reported by me at the hearing in the above case before the Postal Rate Commission.

Date: 10/26/06



official Reporter
Heritage Reporting Corporation
Suite 600
1220 L Street, N.W.
Washington, D.C. 20005-4018